SESSIONAL PAPERS

VOLUME 10

SIXTH SESSION OF THE SEVENTH PARLIAMENT

OF THE

DOMINION OF CANADA

SESSION 1896

VOLUME XXIX

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SESSIONAL PAPERS

OF THE

PARLIAMENT OF CANADA

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1. Report of the Auditor General on Appropriation Accounts, for the year 1894-95. Presented (First Part) 29th January, 1896, by Hon. G. E. Foster (second and concluding part presented 18th February, 1896).... ..... *Printed for both distribution and sessional papers.*

1a. Return of Treasury Board Overrulings since session of 1895 on appeal from the decision of the Auditor General *re* purchase of land for Manitoba Penitentiary. Presented 17th January, 1896, by Hon. G. E. Foster..... *Printed for both distribution and sessional papers.*

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2. Public Accounts of Canada for the fiscal year ended 30th June, 1895. Presented 17th January, 1896, by Hon. G. E. Foster. 2*a*. Estimates for the fiscal year ended 30th June, 1897; presented 27th January. 2*b*. Supplementary Estimates for the year ending 30th June, 1896; presented 6th April, 1896..... .... *Printed for both distribution and sessional papers.*

3. List of Shareholders in the Chartered Banks of Canada, as on the 31st December, 1895. Presented 13th April, 1896, by Hon. G. E. Foster..... ....*Printed for both distribution and sessional papers.*

3a. Report of dividends remaining unpaid and unclaimed balances in the Chartered Banks of Canada, for five years and upwards, prior to 31st December, 1895. Presented 17th April, 1896, by Hon. G. E. Foster..... .... *Printed for both distribution and sessional papers.*

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4. Report of the Superintendent of Insurance for the year ending 31st December, 1895. *Printed for both distribution and sessional papers.*

4a. Preliminary statements of the business of Life Insurance Companies in Canada, for the year ending 31st December, 1895. Presented 2nd March, 1896, by Hon. G. E. Foster. *Printed for both distribution and sessional papers.*

4b. Abstracts of Statements of Insurance Companies in Canada, for the year ended 31st December, 1895. *Printed for both distribution and sessional papers.*

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5. Report of the Department of Trade and Commerce, for the year ended 30th June, 1895. Presented 7th February, 1896, by Hon. W. B. Ives.... ..*Printed for both distribution and sessional papers.*

5a. Reports of the High Commissioner in connection with the Department of Trade and Commerce. *Printed for both distribution and sessional papers.*

6. Tables of the Trade and Navigation of Canada for the fiscal year ended 30th June, 1895. Presented 24th January, 1896, by Hon. J. F. Wood.....*Printed for both distribution and sessional papers.*

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7. Inland Revenues of Canada. Excise, &c., for the fiscal year ended 30th June, 1895. Presented 9th January, 1896, by Hon. J. Costigan.....*Printed for both distribution and sessional papers.*

7a. Inland Revenues of Canada. Inspection of Weights and Measures and Gas, for the fiscal year ended 30th June, 1895. Presented 9th January, 1896, by Hon. J. Costigan.
Printed for both distribution and sessional papers.

7b. Inland Revenues of Canada. Adulteration of Food, for the fiscal year ended 30th June, 1895. Presented 9th January, 1896, by Hon. J. Costigan.
Printed for both distribution and sessional papers.

8. Report of the Minister of Agriculture for the calendar year 1895. Presented 21st February, 1896, by Hon. G. E. Foster.....*Printed for both distribution and sessional papers.*

8a. Report on Canadian Archives, 1895. Presented 24th March, 1896, by Hon. G. E. Foster.
Printed for both distribution and sessional papers.

8b. Conference on the Copyright Question. Presented 23rd January, 1896, by Hon. W. H. Montague.
Printed for both distribution and sessional papers.

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8c. Report of the Director and Officers of the Experimental Farms, for the year 1895. Presented 6th April, 1896, by Hon. G. E. Foster.....*Printed for both distribution and sessional papers.*

8d. Criminal Statistics for the year 1895.....*Printed for both distribution and sessional papers.*

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9. Annual Report of the Minister of Public Works, for the fiscal year ended 30th June, 1895. Presented 26th February, 1896, by Hon. J. A. Ouimet....*Printed for both distribution and sessional papers.*

10. Annual Report of the Department of Railways and Canals, for the fiscal year ended 30th June, 1895. Presented 6th February, 1896, by Hon. J. Haggart.
Printed for both distribution and sessional papers.

10a. Railway Statistics of Canada, for the year ended 30th June, 1895. Presented 30th January, 1896, by Hon. J. Haggart.....*Printed in No. 10.*

10b. Canal Statistics for season of navigation, 1894. Presented 30th January, 1896, by Hon. J. Haggart.
Printed in No. 10.

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11. Annual Report of the Department of Marine and Fisheries (Marine) for the fiscal year ended 30th June, 1895. Presented 10th February, 1896, by Hon. J. Costigan.
Printed for both distribution and sessional papers.

11a. Annual Report of the Department of Marine and Fisheries (Fisheries) for the fiscal year ended 30th June, 1895. Presented 28th February, 1896, by Hon. J. Costigan.
Printed for both distribution and sessional papers

11b. Report of an investigation into the Pilotage System at St. John, N.B. Presented 24th January, 1896, by Hon. J. Costigan.....*Printed for both distribution and sessional papers.*

11c. List of Shipping issued by the Department of Marine and Fisheries: being a list of vessels on the registry books of the Dominion of Canada on the 31st December, 1895.
Printed for both distribution and sessional papers.

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11d. Report of the Chairman of the Board of Steamboat Inspection, etc., for calendar year ended 31st December, 1895.....*Printed for both distribution and sessional papers.*

12. Report of the Postmaster General, for the year ended 30th June, 1895. Presented 23rd January, 1896, by Sir A. P. Caron.....*Printed for both distribution and sessional papers.*

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13. Annual Report of the Department of the Interior, for the year 1895. Presented 12th February, 1896, by Hon. T. M. Daly..... .....*Printed for both distribution and sessional papers.*

13a. Summary Report of the Geological Survey Department, for the year 1895. Presented 13th March, 1896, by Hon. T. M. Daly.....*Printed for both distribution and sessional papers.*

14. Annual Report of the Department of Indian Affairs, for the year ended 30th June, 1895. Presented 7th February, 1896, by Hon. T. M. Daly. .....*Printed for both distribution and sessional papers.*

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15. Report of the Commissioner of the North-West Mounted Police Force, 1895. Presented 23rd March, 1896, by Hon. T. M. Daly..... .. *Printed for both distribution and sessional papers.*

15a. Supplementary Report of the Commissioner of the North-west Mounted Police Force, 1895. Presented 16th April, 1896, by Hon. T. M. Daly....*Printed for both distribution and sessional papers.*

16. Report of the Secretary of State of Canada, for the year ended 31st December, 1895. Presented 23rd March, 1896, by Sir Charles Tupper... ... *Printed for both distribution and sessional papers.*

16a. Civil Service List of Canada, 1895. Presented 17th January, 1896, by Hon. J. A. Ouimet. *Printed for both distribution and sessional papers.*

16b. Annual Report of the Department of Public Printing and Stationery of Canada, for the year ending 30th June, 1895, with a partial report for services during six months ending 31st December, 1895. Presented 9th March, 1896, by Hon. Sir Charles Tupper. *Printed for both distribution and sessional papers.*

16c. Report of the Board of Civil Service Examiners for the year ended 31st December, 1895. Presented 20th March, 1896, by Sir Charles Tupper . . . .*Printed for both distribution and sessional papers.*

17. Report of the Joint Librarians of Parliament for the year 1895. Presented 2nd January, 1896, by the Hon. The Speaker..... ....*Printed for sessional papers only.*

18. Report of the Minister of Justice as to the Penitentiaries of Canada, for the year ended 30th June, 1895. Presented 7th February, 1896, by Hon. A. R. Dickey. *Printed for both distribution and sessional papers.*

19. Report of the Department of Militia and Defence of Canada, for the year ended 30th June, 1895. Presented 30th January, 1896, by Hon. A. R. Dickey. *Printed for both distribution and sessional papers.*

20. Statement showing the bounty paid on steel billets, manufactured in Canada, from 31st March, 1895, to 31st December, 1895. Presented 17th January, 1896, by Hon. J. F. Wood. *Not printed.*

21. Statement showing the bounty paid on pig iron manufactured in Canada, from 4th April, 1895, to 9th January, 1896, and quantity produced. Presented 17th January, 1896, by Hon. J. F. Wood. *Not printed.*

22. Statement of Governor General's Warrants issued on account of the fiscal year 1895-96, made as directed by the Consolidated Revenue and Audit Act. Presented 17th January, 1896, by Hon. G. E. Foster.... .....*Not printed.*

23. Statement of all superannuations and retiring allowances in the civil service during the year ended 31st December, 1895, giving name, rank, salary, service, allowance and cause of retirement of each person superannuated; also whether vacancy filled by promotion or new appointment, and salary of any new appointee. Presented 17th January, 1896, by Hon. G. E. Foster..*Not printed.*

24. Statement of expenditure on account of miscellaneous unforeseen expenses, from 1st July, 1895, to 2nd January, 1896. Presented 17th January, 1896, by Hon. G. E. Foster.....*Not printed.*

25. Return to an order of the House of Commons, dated 3rd February, 1896, for a return showing the names of the operators and location of mills in which corn was ground for human food during the year ending 30th June, 1895. The number of bushels ground by each, and the gross amount of rebate made to each, and the amount of rebate yet due or claimed by each and not paid, if any. Presented 20th February, 1896.—*Mr. McMullen*.....*Not printed.*

26. List of public officers to whom commissions have issued under chapter 19 of the Revised Statutes of Canada, during the year 1895. Presented 17th January, 1896, by Hon. J. A. Ouimet. *Printed in No. 16.*

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27. Report of the Commissioner of Dominion Police, for the year 1895, under Revised Statutes of Canada, chapter 184, section 5. Presented 17th January, 1896, by Hon. T. M. Daly.....*Not printed.*

28. Return to an order of the House of Commons, dated 8th July, 1895, for a copy of all memorials, petitions and other documents from the Indians of St. Peter's Reserve, Manitoba, and of all correspondence in relation thereto, since 1st January, 1892. Presented 20th January, 1896.—*Mr. Laurier*.....*Not printed.*

29. Copy of an order in council of the 8th January, 1896, continuing for the current year the issue of licenses to United States fishing vessels to enter any ports on the Atlantic coast for the purchase of bait, etc. Presented 20th January, 1896, by Hon. J. Costigan.....*Not printed.*

30. Statement in reference to fishing bounty payments for 1894-95, required by chapter 96 of the Revised Statutes of Canada. Presented 20th January, 1896, by Hon. J. Costigan.....*Not printed.*

31. Return of orders in council which have been published in the *Canada Gazette* and in the *British Columbia Gazette*, in accordance with the provisions of section 38 of the regulations for the survey, administration, disposal and management of Dominion lands within the 40-mile railway belt in the province of British Columbia. Presented 21st January, 1896, by Hon. T. M. Daly..*Not printed.*

31*a*. Return of orders in council which have been published in the *Canada Gazette*, in accordance with the provisions of clause 91 of the Dominion Lands Act, chapter 54, Revised Statutes of Canada. Presented 21st January, 1896, by Hon. T. M. Daly.....*Not printed.*

32. Return under resolution of the 20th February, 1882, in so far as the same is furnished by the department of the interior, respecting the Canadian Pacific Railway Company. Presented 22nd January, 1896, by Hon. T. M. Daly.....*Not printed.*

32*a*. List of all lands sold by the Canadian Pacific Railway Company, from the 1st October, 1894, to the 1st October, 1895. Presented 10th February, 1896, by Hon. T. M. Daly.....*Not printed.*

33. Return to an order of the House of Commons, dated 10th June, 1895, for a return showing: 1. Number of manufacturing industries in the city of Chatham, specifying the name of each and name of the proprietor. 2. Number of hands employed in each factory. 3. The value of the output of each factory. 4. Amount of capital invested in each factory. 5. Total wages paid by each factory. 6. Value of raw material in each factory. Presented 23rd January, 1896.—*Mr. Campbell*.....*Not printed.*

33*a*. Return to an order of the House of Commons, dated 10th June, 1895, for a return showing: 1. Number of manufacturing industries in the town of Wingham, specifying the name of each and name of proprietor. 2. Number of hands employed in each factory. 3. The value of the output of each factory. 4. Amount of capital invested in each factory. 5. Total wages paid by each factory. 6. Value of raw material in each factory. Presented 23rd January, 1896.—*Mr. McDonald (Huron)*.....*Not printed.*

34. Detailed statement of all bonds and securities registered in the department of the secretary of state for Canada, since last return, 1895, submitted to the parliament of Canada under section 23, chapter 19, of the Revised Statutes of Canada. Presented 23rd January, 1896, by Hon. J. A. Ouimet.....*Not printed.*

35. Return to an order of the House of Commons, dated 3rd June, 1895, for copies of the contract made between the postmaster general and Mr. Jos. Lamontagne, on 1st July, 1894, for carrying the mail between Lake Etchemin and St. Rose de Watford; also of all documents, correspondence, tenders and reports, other than confidential, in relation to the cancelling of the said contract, and of the new contract subsequently made by the government and of the tenders that preceded it. Presented 24th January, 1896.—*Mr. Vaillancourt*.....*Not printed.*

35*a*. Return to an order of the House of Commons, dated 3rd June, 1895, for a return showing all correspondence, reports, tenders received and contracts entered into for carrying mail matter between Battleford and Saskatoon, in the North-west Territories, during the past three years. Presented 24th January, 1896.—*Mr. Martin*.....*Not printed.*

35*b*. Return to an order of the House of Commons, dated 3rd June, 1895, for copies of all petitions, letters and papers with reference to a daily mail service between Matane, in the county of Rimouski, and Ste. Anne des Monts, in the county of Gaspé. Presented 24th January, 1896.—*Mr. Joncas.*

Not printed.

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35c. Return to an order of the House of Commons, dated 25th March, 1896, for copy of mail contracts with the Canadian Pacific Railway from Winnipeg to Pilot Mound, and points west of same. Presented 13th April, 1896.—*Sir Richard Cartwright*.....*Not printed.*

35d. Return to an order of the House of Commons, dated 17th February, 1896, for copies of tenders received during the year 1895 for the conveyance of the mails between the 108 Mile House, British Columbia, and Horsefly, with the amounts in each case. Any correspondence had between the post office inspector (Mr. Fletcher) or the department, and the members representing Cariboo or Yale in relation to the conveyance of the mail over the said route. The copy of the contract now in force, its amount, and the party with whom such contract has been made. Copies of the tenders received during the year 1895 for the conveyance of the mails between the 150 Mile House and Keithley Creek, showing to whom was the contract awarded and for what amount, and whether such contract was transferred to any one, and if so, to whom, and on what terms. Presented 17th April, 1896.—*Mr. McMullen*.....*Not printed.*

35e. Return to an address of the House of Commons to his excellency the Governor General, dated 9th March, 1896, for copies of all correspondence between the Canadian Pacific Railway Company and the government relating to claims for an increase of the amount paid to that company for the carriage of mail matter, and for copies of any orders in council or departmental regulations respecting such claims. Presented 17th April, 1896.—*Mr. Borden*.....*Not printed.*

36. Return to an order of the House of Commons, dated 26th April, 1895, for a return showing : 1. The names of all superannuated officers on the superannuated list on the 1st day of January, 1895. 2. The date of their appointment as permanent civil servants. 3. The amount of salary at time of appointment. 4. The number of years in the service. 5. The amount of salary at time of superannuation. 6. The date of their superannuation and number of years added to time of service, if any. 7. The amount of annual retiring allowance granted. 8. The gross amount paid into the fund by each retired officer on the list on the 1st of January, 1895. 9. The gross amount drawn by each superannuated officer on the superannuated list up to the 1st of January, 1895. 10. The age of each superannuated officer on the list on the 1st of January, 1895, at the date of his superannuation. 11. The names of all persons who have been on the superannuation list since the act came into force and have died before January 1st, 1895, and the information concerning each which is asked for in the preceeding nine paragraphs with respect to those mentioned in paragraph one. Presented 27th January, 1896.—*Mr. McMullen*.....*Not printed.*

37. Statement in pursuance of section 17 of the Civil Service Insurance Act, for the year ending 30th June, 1895. Presented 28th January, 1896, by Hon. G. E. Foster.....*Not printed.*

38. Return (in part) to an address of the House of Commons to his excellency the Governor General, dated 28th January, 1896, for a copy of an order in council relating to the quarantine and transit through Canada of cattle from the United States, especially with reference to the port of St. John, New Brunswick, and of all other orders in council and departmental or other regulations applicable to the transit of cattle from the United States through Canada, and a statement showing what provision has been made for the transit of such cattle being carried out according to the requirements of such orders in council and regulations; also statement showing what numbers of American cattle, if any, have already been shipped via St. John under the terms of the order in council. Presented 28th January, 1896.—*Mr. Foster* and *Mr. Mulock*.....*Not printed.*

38a. Supplementary return to No. 38. Presented 17th February, 1896.—*Mr. Foster* and *Mr. Mulock*. *Not printed.*

39. Copy of further correspondence between the government of Canada and the government of the province of Manitoba, respecting the Manitoba school question. Presented 30th January, 1896, by Hon. G. E. Foster.....*Printed for both distribution and sessional papers.*

39a. Return to an address of the House of Commons to his excellency the Governor General, dated 29th January, 1896, for a return of all orders in council and official correspondence, and all other documents, not already laid on the table of this house, in reference to the Manitoba school question. Presented 6th February, 1896.—*Mr. LaRivière*...*Printed for both distribution and sessional papers.*

39aa. Copies of papers with reference to the sending of a deputation to Winnipeg to confer with the Manitoba government, regarding the Manitoba School Law. Presented 26th March, 1896, by Sir Charles Tupper.....*Printed for both distribution and sessional papers.*

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39*b*. Return to an address of the House of Commons to his excellency the Governor General, dated 16th March, 1896, for copy of the report made by his honour the lieutenant governor of the North-west Territories to his excellency the governor general respecting the bill intituled: "An ordinance to amend and consolidate, as amended, the ordinances respecting schools," passed by the legislative assembly at its last session, and which was reserved for the assent of his excellency; any order in council or report made in respect thereof and the said bill. Presented 26th March, 1896.—*Mr. McCarthy*. ..... *Printed for both distribution and sessional papers.*

39*c*. Report of the commissioners appointed to confer with the government of Manitoba on the subject of the schools in that province. Also extracts of reports of the committee of the honourable the privy council of the 17th and 27th March, 1896, with reference to the appointment of a commission to confer with the government of the province of Manitoba on the subject of the schools in that province. Presented 6th April, 1896, by Sir Charles Tupper.

Printed for both distribution and sessional papers.

40. Return to an address of the House of Commons to his excellency the Governor General, dated 8th July, 1895, for copies of all petitions, correspondence, documents, or other papers from the electors of the riding of South Renfrew, or any one or more of them, or any other person, addressed to the governor general or the minister of railways, in reference to the closing of the railway station at Barry's Bay, a station on the Ottawa, Arnprior and Parry Sound Railway, in the county of Renfrew, and for papers or correspondence, as above, containing complaints of any persons against the said railway company, for inconvenience and business losses occasioned by the closing of said railway station, and for papers or correspondence, as above, complaining against the action of said railway company, so largely assisted by government moneys, for inconveniencing and injuring public business, in attempting to coerce an individual into giving the company land or privileges which the company could not obtain by action at law. Presented 6th February, 1896.—*Mr. Casey.*

Not printed.

41. Return to an address of the House of Commons to his excellency the Governor General, dated 27th January, 1896, for copies of correspondence by letter or telegram between the government and Sir Charles Tupper, Bart., concerning his present visit to Canada. Presented 7th February, 1896.—*Mr. Casey*. ..... *Not printed.*

42. Return to an address of the House of Commons to his excellency the Governor General, dated 29th January, 1896, for copies of all petitions, applications, letters, etc., asking for a commutation of the sentence of death recorded against Valentine Shortis, into imprisonment for life, and of all letters and memorials asking that the law be allowed to take its course; also the report of Mr. Justice Mathieu, and the report of the Minister of Justice, and any decision, order or warrant dealing with the said case. Also a statement showing whether any petitions for commutation of the death sentence were submitted to council, and, if so, what decision (if any) was arrived at in regard thereto. Also for copies of any correspondence between his excellency the governor general and the colonial secretary, whether by cablegram or otherwise, on the same subject. Presented 11th February, 1896.—*Messrs. Bergeron, Mulock* and *Davies.*

Printed for distribution only.

43. Report of the Board of Visitors for the Royal Military College, for the year 1895. Presented 12th February, 1896, by Hon. A. R. Dickey..... *Printed for distribution only.*

43*a*. Report of Mr. Sandford Fleming, C.M.G., a member of the Board of Visitors of the Royal Military College. Presented 25th March, 1896, by Sir Adolphe Caron..... *Printed for distribution only.*

43*b*. Letters from the Commandant of the Royal Military College, submitting remarks on the Report of the Board of Visitors of said College, and also on the Report of Mr. Sandford Fleming, C.M.G., a member of said board. Presented 25th March, 1896, by Sir Adolphe Caron.

Printed for distribution only.

43*c*. Letter and report from the general officer commanding the Canadian militia, in reference to the Royal Military College at Kingston. Presented 26th March, 1896, by Sir Adolphe Caron.

Printed for distribution only.

44. Return to an address of the House of Commons to his excellency the Governor General, dated 3rd February, 1896, for copies of all orders in council and correspondence relating to the appointment of the Honourable E. G. Prior, and of the Honourable John F. Wood, to the privy council of Canada; and copies of the commissions or instruments appointing them to the privy council, and appointing them also to the respective offices which they now hold in the administration. Presented 12th February, 1896.—*Mr. Laurier*..... *Not printed.*

CONTENTS OF VOLUME 11—*Continued.*

45. Return to an order of the House of Commons, dated 3rd February, 1896, for a statement of the total expenditure in connection with the central experimental farm at Ottawa, up to the 1st day of January, 1896: The price paid for the land. The total cost of buildings, and labour in making permanent improvements, and the total cost of other labour on the farm. The amounts paid for manure and fertilizers. The amount paid for live stock. The total amount paid for machinery and implements. The amount paid for harness. The value of live stock on the farm, 1st January, 1896. The total revenue from sales of live stock, butter, cheese and produce of the farm, to 1st January, 1896. Presented 17th February, 1896.—*Mr. McMillan*.....*Not printed.*

46. Return to an address of the House of Commons to his excellency the Governor General, dated 27th January, 1896, for a statement showing the names of all persons appointed to any positions in connection with the customs at Toronto since 1st July, 1891, with dates of appointments and salaries of such appointees. Presented 17th February, 1896.—*Mr. McMillan*..... .. *Not printed.*

47. Return to an address of the House of Commons to his excellency the Governor General, dated 10th February, 1896, for copies of the order in council appointing the Hon. Désiré Girouard one of the judges of the supreme court of Canada. Presented 17th February, 1896.—*Mr. Tarte*.

Not printed.

48. Return to an address of the House of Commons to his excellency the Governor General, dated 27th January, 1896, for copies of all orders in council, instructions from the government or any department, and other documents relating to the appointment of a high commissioner in London, or the nature of his duties, or his discharge of those duties, which have not already been laid before this house. Presented 17th February, 1896.—*Mr. Casey*.....*Not printed.*

49. Return to an address of the House of Commons to his excellency the Governor General, dated 10th February, 1896, for copies of orders in council in relation to appointments of senators, made since 1st January, 1896. Presented 20th February, 1896.—*Mr. Tarte*.....*Not printed.*

50. Return to an order of the House of Commons, dated 10th June, 1895, for copies of all papers and correspondence connected with the part ownership of the Moose Jaw town site by the government of Canada, including a statement of the amount of money received by the town site trustees, the amount received by the government of the Dominion, the number of lots still held by the Dominion government, and the amount of taxes paid annually by the government since Moose Jaw was erected into a municipality. Presented 24th February, 1896.—*Mr. Davin*.

Not printed.

51. Return to an order of the House of Commons, dated 3rd February, 1896, for copies of all correspondence with regard to the granting of a license to manufacture and sell beer in the town of Neepawa, in Manitoba. Also copies of all petitions from residents of said town protesting against said license. Presented 24th February, 1896.—*Mr. Martin*.....*Not printed.*

52. Return to an order of the House of Commons, dated 29th January, 1896, for a return of: 1. All fees received by the government under the provisions of the Act commonly known as the McCarthy Act, from the several municipal corporations or from parties applying for licenses under that act, in the electoral district of Provencher, in the province of Manitoba. 2. A list of unpaid claims and amount thereof in connection with the said act in the same electoral district. Presented 24th February, 1896.—*Mr. LaRivière*.....*Not printed.*

53. Return to an address of the House of Commons to his excellency the Governor General, dated 10th February, 1896, for copies of all reports to council and orders in council, judge's report and other papers and correspondence respecting the release of Charles Chamberlain from confinement at Stony Mountain penitentiary in Manitoba on a conviction for perjury in connection with the last Dominion election in the city of Winnipeg. Also copies of all letters, petitions or other communications to the government, or any member or department, or to his excellency; and of all letters by or on behalf of any member of the government or any department, in reference to commutation of Chamberlain's term of imprisonment. Presented 24th February, 1896.—*Mr. Martin* and *Mr. Mulock*.....*Not printed.*

54. Return to an order of the House of Commons, dated 10th February, 1896, for a full return of the census of the North-west Territories recently taken by the mounted police, showing the number of male and female inhabitants in each division and showing boundaries of divisions. Presented 27th February, 1896.—*Mr. Martin*.....*Not printed.*

CONTENTS OF VOLUME 11—*Continued.*

55. Return to an order of the House of Commons, dated 10th February, 1896, for a return showing the amount of money paid to each of the several parties who have received a bounty during the year 1895 from the appropriation to encourage the production of the beet root. Presented 4th March, 1896.—*Mr. Mills (Bothwell)*.....*Not printed.*

56. Return to an address of the House of Commons to his excellency the Governor General, dated 2nd March, 1896, for a copy of the contract entered into between the Minister of Trade and Commerce on behalf of Her Majesty and the trustees for the bondholders of the Canada Shipping Company, for a steamship service between St. John, New Brunswick, and Liverpool, Great Britain. Presented 6th March, 1896.—*Mr. Hazen*.....*Not printed.*

57. Return to an order of the House of Commons, dated 26th February, 1896, for a return showing the number of vessels that passed through the Chambly canal in each of the years 1892, 1893, 1894 and 1895; the said return to show, separately, the number of vessels loaded with coal and those loaded with wood, as well as those bound upwards and those bound downwards. Presented 9th March, 1896.—*Mr. Langelier*.....*Not printed.*

57*a*. Return to an order of the House of Commons, dated 17th February, 1896, for a statement showing amount of each claim made by the government for damages alleged to have been occasioned by vessels navigating the new Welland canal from the date of its first opening up to the 31st December, 1895, giving names of the respective vessels and owners thereof; the nature of the damages and how each claim was settled, whether by being paid in whole or in part or not at all, and if any such claims are still unsettled. Statement showing amount of each unsettled claim, and name of each vessel (with names of owners) in respect of which any such unsettled claim exists. Presented 9th March, 1896.—*Mr. Gibson*.....*Not printed.*

58. Return to an order of the House of Commons, dated 17th February, 1896, for copies of all letters, petitions, correspondence or documents of any nature whatsoever, asking the government to take the necessary steps to secure the ownership of the Baie des Chaleurs Railway, with a view to making it a branch of the Intercolonial Railway. Presented 9th March, 1896.—*Mr. Joncas.*
Not printed.

59. Return to an order of the House of Commons, dated 26th February, 1896, for copies of all correspondence, papers and documents relating to the sale or chartering of the steamer "Alert." Presented 9th March, 1896.—*Mr. Langelier*.....*Not printed.*

60. Return to an order of the House of Commons, dated 10th February, 1896, for a return showing the amount of corn and other grain imported by each of the distillers for the year 1895. The total amount of corn imported required for human food. Presented 9th March, 1896.—*Mr. Mills (Bothwell)*.....*Not printed.*

61. Report upon the Sweating System in Canada. Presented 13th March, 1896, by Sir Charles Tupper.
Printed for both distribution and sessional papers.

61*a*. Supplementary return to No. 61. Presented 24th March, 1896.
Printed for both distribution and sessional papers.

62. Return to an address of the Senate to his excellency the Governor General, dated 2nd May, 1895, for a return of the number of bushels of wheat delivered to the elevators at Fort William and Port Arthur, and the grade; the number of bushels loaded on vessels, and the grade; the nationality and destination of the vessels carrying the grain; also a copy of the conditions of the grade as fixed by the board of inspectors assembled for the purpose of fixing the grade for 1894. Presented 25th February, 1896.—*Hon. Mr. Boulton*.....*Not printed.*

63. Return to an address of the Senate to his excellency the Governor General, dated 11th February, 1896, for a return showing the names of all civil service employees, belonging to the secretary of state department and to the department of agriculture, who have been superannuated since the 1st day of July, 1894; also giving their age, the number of years they have been in the service, their salary and amount of superannuation allowance granted in each case. In the case of employees not having reached the full age of sixty years, or who had not completed thirty-five years of service, the reasons for their superannuation and the report of the treasury board in each such case. Also the names, ages and years of service of all employees belonging to the aforesaid departments to whom notice has been given of the intention to dismiss or superannuate them. Presented 3rd March, 1896.—*Hon. Mr. Poirier*.....*Not printed.*

CONTENTS OF VOLUME 11—*Continued.*

64. Return to an address of the Senate to his excellency the Governor General, dated 10th February, 1896, for copies of all maps, reports, estimates, etc., regarding the Ottawa canal, and especially those of T. C. Clarke and Walter Shanly; also copies of all correspondence, petitions, resolutions, reports and other papers which have been filed with the honourable the minister of railways and canals, regarding and in favour of the Montreal, Ottawa and Georgian Bay canal. Presented 13th March, 1896.—*Hon. Mr. Clemow*.....*Not printed.*

65. Return to an address of the Senate to his excellency the Governor General, dated 13th June, 1895, for copies of all correspondence and telegrams that have passed between the postmaster general, or any member of the government, and the British Columbia board of trade, the city council of Victoria, the members representing the city district of Victoria in the house of commons, the postmaster of Victoria, or any one else, from the 1st of January, 1894, to the 1st May, 1895, relative to the "provisional allowance," and the withholding of the same from the post office clerks and letter carriers of the city of Victoria, British Columbia. Presented 19th March, 1896—*Hon. Mr. McInnes (Victoria.)*.....*Not printed.*

66. Return to an order of the House of Commons, dated 16th March, 1896 for a copy of the list of electors for the constituency of Yale and Cariboo. Presented 23rd March, 1895.—*Mr. Martin.*
Not printed.

67. Return to an order of the House of Commons, dated 27th January, 1896, for a return showing: The number of employees on the Intercolonial Railway on the 30th June last, distinguishing between temporary and permanent employees. The number of miles of railway operated at same date. The number of stations and stationmasters. The number of cars put on the line during the fiscal year ending 30th June, 1895, and charged to working expenses. The number of engines put on the line and charged to working expenses. The number of cars put on and charged to capital account The number of engines put on and charged to capital account. The number of tons of new rails put down and charged to working expenses. The number of tons put down and charged to capital account. The number of ties put down and the number charged to working expenses and capital account respectively. The number of bridges repaired or put in and charged to capital account and the number put in or repaired and charged to working expenses. The number of overhead bridges renewed and charged to working expenses and the number to capital account. The amount spent on fencing and charged to working expenses and the amount charged to capital account. The total amount spent on new buildings of any kind along the line, and the portion charged to capital account and working expenses respectively. The total amount spent in repairs of buildings and the amount charged therefor to capital account and working expenses respectively. The amount spent on drains, ditches and culverts along the line, over and above what was done by section-men, and the portion thereof charged to working expenses and the portion to capital account. Presented 23rd March, 1896.—*Mr. McMullen* and *Mr. Davies*.....*Not printed.*

68. Return to an order of the House of Commons, dated 8th July, 1895, for: 1. Return showing the names of the several railways in the Dominion to which a cash subsidy was paid. 2. The province in which said railway is located. 3. The number of miles subsidized. 4. The number built. 5. The amount per mile granted and the gross amount paid. 6. The number of acres of land granted per mile, and the gross number of acres given or now due to each company. 7. The gross amount of cash subsidy given to railways in each province. 8. The gross number of acres of land granted in each province, and the grand total of money and land given to railways in the Dominion. Presented 23rd March, 1896.—*Mr. McMullen*.....*Not printed.*

68a. Supplementary return to No. 68. Presented 26th March, 1896.—*Mr. McMullen*.....*Not printed.*

69. Return to an order of the House of Commons, dated 9th March, 1896, for copies of all papers, correspondence and reports relating to the claim of Dr. Wall, of Emerald, Prince Edward Island, for damages for alleged injuries received by him on the Prince Edward Island Railway. Presented 23rd March, 1896.—*Mr. Davies*.....*Not printed.*

70. Return to an order of the House of Commons, dated 9th March, 1896, for a detailed statement of the cost of the Freight Rates Commission. Presented 23rd March, 1896.—*Mr. Martin*..*Not printed.*

71. Detailed statement of correspondence between the high commissioner's office in London, and the privy council office, 1880 to 1896. Presented 23rd March, 1896, by Sir Charles Tupper
Not printed.

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71a. Detailed memorandum showing the nominal value and actual cost of the Canadian silver and copper coinage, procured through the high commissioner, between the years 1883 and 1895, inclusive, and also the saving effected. Presented 24th March, 1896, by Sir Charles Tupper. .... *Not printed.*

72. Statement of the affairs of the British Canadian Loan and Investment Company, on the 31st December, 1895. Presented 23rd March, 1896, by the Hon. The Speaker ..... *Not printed.*

73. General statements and returns of baptisms, marriages and burials in the districts of Montmagny and Ottawa, for the year 1895. Presented 23rd March, 1896, by the Hon. The Speaker.
Not printed.

74. Copy of the Joint Report of the Commissioners appointed under Article I of the Convention between the United States of America and the United Kingdom of Great Britain and Ireland, for the delimitation of the boundary line between the United States and the Dominion of Canada, dividing Alaska from British Columbia, together with an approved minute of council thereon of 25th February, 1896. Presented 25th March, 1896, by Sir Charles Tupper.
Printed for both distribution and sessional papers.

75. Return to an order of the House of Commons, dated 27th January, 1896, for copies of all correspondence in connection with the territorial exhibition held last summer at Regina, and all papers showing the connection of the lieutenant governor of the Territories with the same, and detailed accounts of receipts and expenditures of said exhibition; also amount still owing on account of same. Presented 17th April, 1896.—*Mr. Martin* ..... *Not printed.*

76. Return to an address of the House of Commons to his excellency the Governor General, dated 9th March, 1896, for copies of all contracts and correspondence between George Goodwin and the department of railways and canals, or any other department of the government, in connection with contracts 4, 5, 6, 7 and 12 on the Soulanges canal. Also copies of all correspondence between the department of railways and canals and the department of justice in connection with said contracts. Also copies of all orders in council bearing upon the claims of George Goodwin, in connection with such contracts. Also copies of the reports to the department of railways and canals, or to any other department, made by the government engineer in charge of said works, bearing upon the work performed by contractor George Goodwin, and bearing upon said contractor Goodwin's claim against the government for extra compensation in connection with water-tight embankment, or in connection with any other claim he has made relating to his contracts on the Soulanges canal works. Presented 27th March, 1896.—*Mr. Davies*..... *Not printed.*

77. Return to an order of the House of Commons, dated 3rd February, 1896, for a copy of the report of the engineer appointed to examine and report on the state of the breakwater at Tignish, Prince Edward Island, during the year 1895. Presented 2nd April, 1896.—*Mr. Perry*..... *Not printed.*

77a. Return to an order of the House of Commons, dated 26th February, 1896, for a statement showing the amount expended by the Dominion government on each of the following breakwaters, piers and wharfs in Prince county, Prince Edward Island, from 1880 up to date:—1. Malpeque breakwater. 2. Cape Traverse breakwater. 3. McGee's wharf, Egmont Bay. 4. Higgins wharf. 5. Brea breakwater. 6. West Point wharf. 7. Miminegash breakwater. 8. Tignish breakwater. The work let by tender, the amount of each contract, the names of contractors, work done by day's work, names of parties in charge, and name of inspector in each case. Presented 2nd April, 1896.—*Mr. Perry*..... *Not printed.*

78. Return to an order of the House of Commons, dated 16th March, 1896, for copies of all correspondence with regard to improvements of St. Andrew's rapids, not already brought down. Presented 2nd April, 1896.—*Mr. Martin*..... *Not printed.*

79. Return to an order of the House of Commons, dated 26th February, 1896, for copies of all petitions, letters, correspondence or documents of any nature whatsoever, asking the government to construct wharfs or piers at Paspébiac, in the county of Bonaventure, with a view to making a harbour of refuge at that place. Presented 2nd April, 1896.—*Mr. Joncas* ..... *Not printed.*

80. Return to an address of the Senate to his excellency the Governor General, dated 5th March, 1896, for copies of all maps, reports, etc., regarding what has been styled the "guard pier," now in course of construction at Montreal; also copies of all correspondence, petitions, resolutions, reports, protests and other papers regarding and in favour of, and opposed to, the said structure, and especially the views thereon expressed by the medical faculty of the city of Montreal, the board of health of the province of Quebec, and the health board of the city of Montreal. Presented 19th March 1896.—*Hon. Sir William Hingston*..... *Not printed.*

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81. Return to an order of the House of Commons, dated 16th March, 1896, for a return showing the name of each licensee to whom fishing licenses were granted by David Sharp, of Port Dover, Ontario, fishery overser, for the years 1894 and 1895, together with the amount received for each license so granted in the years 1894 and 1895 aforesaid. Presented 13th April 1896.—*Mr. Charlton.*
Not printed.

82. Interim report on the effect of the Chicago drainage channel on the levels of the great lakes. Presented 13th April, 1896, by Hon. J. Costigan.
Printed for both distribution and sessional papers.

83. Return to an order of the House of Commons, dated 16th March, 1896, for copies of all papers relating to the sale of lots numbers fifteen and sixteen, on the west side of Cayuga street, in the village of Cayuga, in the province of Ontario, to W. A. Mitchell, or any other person, including copy of petition and signatures, asking for the sale of said lots; also information as to whether at any time in the past, application has been made to the government for permission to use the said lots as a burial place, and whether permission by the government or any official of the government, was given for the use of the said lots for such purpose; also whether the government at the time the said lots were sold was aware that they had been used as a burial place, and that several hundred bodies were buried there. Presented 13th April, 1896.—*Mr. Charlton* .. ..*Not printed.*

84. Return to an order of the House of Commons, dated 25th March, 1896, for copies of all correspondence, papers, documents, telegrams, etc., from steamship and shipowners and agents, marine underwriters, manufacturers, merchants and others, of the city of Montreal and elsewhere, in the hands of the government, in reference to a harbour of refuge in Little Metis Bay. Presented 13th April, 1896.—*Mr. McShane.* ....*Not printed.*

84*a*. Supplementary return to No. 84. Presented 22nd April, 1896.—*Mr. McShane*... ..*Not printed.*

85. Return to an order of the House of Commons, dated 3rd June, 1895, for a return showing the amount paid in each department of the government in the inside service at Ottawa for temporary clerks during the several years from 1st July, 1880, to 30th June, 1894, separately in each department for each year. Presented 20th April, 1896.—*Mr. McMullen* .....*Not printed.*

86. Return to an order of the House of Commons, dated 25th March, 1896, for copies of all papers and correspondence between E. Adams, formerly inspector of boilers, etc., at Kingston, and now chairman of board of steamboat inspectors, and the department of marine and fisheries, relative to any complaints by said Adams against T. Donnelly, hull inspector at Kingston, or relative to his discharge of the duties of that office. Presented 20th April, 1896.—*Mr. Borden* .....*Not printed.*

87. Return to an order of the House of Commons, dated 1st April, 1896, for copies of all correspondence between the department of the interior and D. J. O'Donoghue, secretary legislative committee, trades and labour council, Toronto, concerning the alleged misquotation in the report of the committee on immigration, 1895, of a certain letter relating to the success of Dr. Barnardo's boys as settlers in Canada. Presented 22nd April, 1896.—*Mr. Casey*.....*Not printed.*

88. Return to an address of the House of Commons to his excellency the Governor General, dated 3rd June, 1895, for a return showing: 1. The names of the several railways in the Dominion to which Dominion aid has been granted, except the Canadian Pacific main line. 2. The province within which the said railway in whole or in part is located, and if in two or more provinces, the number of miles in each. 3. The county or counties through which the said lines run in each province. 4. The amount of money actually paid to each up to the 1st January, 1895. 5. The railways built in the Dominion by the Dominion since confederation, excepting the main line of the Intercolonial and main line of the Canadian Pacific. 6. The province within which built. 7. The entire cost of each line built or assisted by the Dominion in each province, including equipment. 8. The entire sum spent up to the 1st January, 1895, last, on the construction of the Dominion roads in each province, except the Intercolonial Railway and Canadian Pacific Railway main lines. Presented 22nd April, 1896.—*Mr. Davies* ....*Not printed.*

89. Return to an order of the House of Commons, dated 10th February, 1896, for a statement of the sums appropriated by parliament for improving the navigation of the St. John river, New Brunswick, and its tributaries, during the years from 1887 to 1895, inclusive; also statement as to what amount of such appropriation was annually expended in such improvements in said river and its tributaries during the same period, together with memorandum as to what points in said river

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these sums were expended, by whom the same was expended, and the character of the work done in each case. Statement as to what portion of the above appropriation was expended at Gibson's Creek, in the county of Carleton; the amount spent, and the nature of the work done. Presented 22nd April, 1896.—*Mr. Colter*.. ..... *Not printed.*

90. Return to an order of the House of Commons, dated 1st April, 1896, for copies of all petitions, letters and correspondence in favour of an indemnity for Joseph Beliveau, for injuries incurred by him while working under the public works department at Sorel. Presented 22nd April, 1896.—*Mr. Bruneau*..... *Not printed.*

91. Return to an order of the House of Commons, dated 25th March, 1896, for a statement giving full particulars of the expenditure of $5,000 on Port Stanley harbour four years ago, including pay-lists, and detailed account of all payments in connection with such expenditure. Presented 22nd April, 1896.—*Mr. Casey*..... *Not printed.*

92. Return to an address of the House of Commons to his excellency the Governor General, dated 16th March, 1896, for a copy of the report of the mechanical engineers of the department of public works, also the order in council passed in relation thereto, and all other correspondence and papers with reference to the unpaid claims of the Ottawa Gas Company, for gas consumed in the parliament buildings of this city, during the years 1866 and 1867. Presented 22nd April, 1896.—*Sir James Grant*..... *Not printed.*

ANNUAL REPORT

OF THE

DEPARTMENT OF THE INTERIOR

FOR THE YEAR

1895

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY
1896

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Department of the Interior.

To His Excellency the Right Honourable Sir John Campbell Hamilton-Gordon, Earl of Aberdeen, &c., &c., &c., Governor General of Canada, &c., &c., &c.

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to lay before Your Excellency the Report of the transactions of the Department of the Interior for the year 1895.

Respectfully submitted,

T. MAYNE DALY,

Minister of the Interior.

OTTAWA, 29th January, 1896.

Department of the Interior.

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Map of a portion of Southern Alberta (sheets Nos. 1 and 2) showing the Canadian Irrigation Surveys during 1894.

The maps above referred to will be found in the paper Pocket accompanying this report.

ANNUAL REPORT

OF THE

DEPARTMENT OF THE INTERIOR

FOR THE YEAR 1895.

DEPARTMENT OF THE INTERIOR,
OTTAWA, 28th December, 1895.

To the Honourable T. MAYNE DALY, Q.C.,
Minister of the Interior.

SIR,—I have the honour to submit the annual report of the Department of the Interior for 1895.

In consequence of the early meeting of parliament, it has not been found possible to bring down the business of the various agencies to the end of the year as was done in the last annual report of the department. The information given in the various tables and statements included in this volume is for the first ten months of the current calendar year.

DEPARTMENTAL CHANGES.

Of the outside staff of the department two have died since the date of my last report—Denis Coleman, immigration guardian, who was attached to the agency at Quebec, and M. Donoghue, a member of the staff of the commissioner's office in Winnipeg.

From and after the 1st July last, three clerks on the staff at headquarters were retired on abolition of office, and two officers of the outside service on account of age. The two last mentioned were Mr. W. H. Stevenson, the agent of Dominion lands at Regina, and Mr. Thomas Anderson, agent at Edmonton—both valued officers and experienced in the performance of duties which brought them into very intimate relation with the people of their respective districts. Mr. Anderson's place has been filled by the transfer of Mr. R. A. Ruttan, who was previously the assistant-secretary of the land board at Winnipeg, the latter office being abolished.

ADMINISTRATION OF THE PUBLIC LANDS.

The following is a comparative statement of the homestead entries and sales which have been made at the several agencies of the department during the ten months ending on the 31st October, 1894, and the corresponding period of 1895.

TEN months ending 31st October, 1894 :—

	Number.	Acreage.
Homestead entries	2,683	429,280
Sales		14,047

TEN months ending 31st October, 1895 :—

	Number.	Acreage.
Homestead entries	2,114	338,240
Sales		27,436

As to sales, I have in previous reports called attention to the fact that the department has not for many years been selling land in the ordinary sense of the term. The odd-numbered sections throughout almost the whole of the surveyed areas have become part of the subsidy of one or other of the railways constructed for the development of the country, and the only moneys now received by the department—apart from the revenue derived from timber, hay and minerals—are the small fees imposed by the law and the regulations in connection with homestead entries, the price of an occasional pre-emption which the holder finds himself unable to take up as a second homestead, and the purchase money of such quarter-sections adjoining their homesteads as settlers who have the means may acquire with the view of increasing their holdings.

The reduction in the number of homestead entries as compared with the corresponding period of last year, although greatly to be regretted, is easily accounted for by reference to the damaging effect upon the crops of 1894 of the excessive drought experienced in the territories, particularly in Eastern Assiniboia.

IMMIGRANT ARRIVALS.

The whole number of arrivals of the immigrant class at the ports of Quebec, Halifax and Montreal during the first 10 months of the present year was 23,363, as compared with 25,653 for the corresponding period of last year, or a decrease of 2,290. Of the persons coming into the country between the 1st of January and the 31st of October last, 17,231 declared their intention of becoming residents of the Dominion of Canada ; 18,923 during the same period of 1894 made this declaration. The persons who signified their intention of making their homes in Manitoba, the North-west Territories and British Columbia, numbered this year, for the period of ten months mentioned, 4,901, which is a decrease of 1,749 as compared with the corresponding period of 1894. As has been explained in previous reports, the immigration agents at the ports of landing count the number of persons arriving by the ocean steamers, and obtain from each a declaration as to whether he intends to remain permanently in the country or not, and the province in which he proposes to reside. No attempt is made to keep trace of immigrants arriving from the United States, except in so far as they become settlers on homestead lands.

Department of the Interior.

NATIONALITIES OF HOMESTEAD SETTLERS.

I submit a statement showing the nationalities of the settlers taking up homesteads during the first ten months of 1895, as compared with the corresponding period of the previous year.

Nationalities.	1894. No. of Entries first 10 months.		1895. No. of Entries first 10 months.	
Canadians from Ontario	446		312	
do do Quebec	59		54	
do do Nova Scotia	17		15	
do do New Brunswick	8		—	
do do Prince Edward Island	10		2	
do do British Columbia	23		14	
do do Manitoba	81		107	
do do North-west Territories	64		23	
		708		527
Persons who had previous entry		386		382
Canadians returned from the States		185		97
United States		514		432
Newfoundland		1		1
New Zealand		1		1
Australians		1		2
English		296		261
Irish		18		23
Scotch		64		76
French		99		81
Belgians		26		15
Italians		—		2
Austro-Hungarians		74		46
Germans		78		44
Hollanders		2		2
Danes, other than Icelanders		10		7
Icelanders		27		15
Swedo-Norwegians		53		20
Russians, other than Mennonites and Poles		136		67
Mennonites		3		4
Poles		1		9
		2,683		2,114
Number of souls		8,244		6,147

Underneath will be found a statement similar to that published last year, giving the number of entries made, respectively, during the calendar years 1893 and 1894, and the first ten months of 1895, by persons coming from the various states and territories of the American Union. In examining the figures for the present year it must be borne in mind that they relate to the first ten months only.

States.	1893.		1894.		First 10 months of '95.	
	Number of Entries.	Number of Souls.	Number of Entries.	Number of Souls.	Number of Entries.	Number of Souls.
Arkansas	1	1				
California	7	22	14	32	4	8
Colorado	8	22	3	3	1	2
Connecticut	3	3	2	4	1	1
Dakota	120	340	121	378	74	263
Florida			1	4		
Idaho	27	83	22	55	33	127
Illinois	10	22	12	44	4	9
Indiana	2	4	1	1	2	13
Iowa	4	9	13	36	12	41
Kansas	12	37	43	146	52	172
Kentucky			1	1	3	5
Maine	3	6	3	9	2	15
Massachusetts	9	45	23	82	4	9
Michigan	93	296	61	175	23	90
Minnesota	87	266	209	650	102	377
Missouri	6	6			2	2
Montana	20	52	18	51	4	7
Nebraska	139	423	78	260	46	153
Nevada	1	1				
New Hampshire	5	10	6	32	1	4
New Jersey	7	19	6	18		
New York	24	57	25	77	11	45
Ohio	4	18	7	17	6	13
Oklahoma					1	1
Oregon	30	92	22	46	19	80
Pennsylvania			10	27	6	16
Rhode Island	1	5	4	10		
Tennessee					1	4
Texas	2	5	1	1	2	5
Utah	50	137	15	56	26	101
Vermont	6	15			5	11
Washington	105	254	105	294	63	165
Wisconsin	29	101	18	52	12	39
Wyoming	3	9	1	5	7	44
State not given			5	22		
	818	2,360	850	2,588	529	1,822

Department of the Interior.

HOMESTEAD AND PRE-EMPTION ENTRIES.

The following statement shows the number of homestead and pre-emption entries reported in each year since 1874, and the number and proportion of those entries which have been cancelled for non-fulfilment of the conditions of entry.

Departmental year ending.	Homesteads.			Pre-emptions.		
	Number of entries.	Number cancelled.	Percentage.	Number of entries.	Number cancelled.	Percentage.
31st October, 1874	1,376	889	64	643	612	95
do 1875	499	303	60	391	229	58
do 1876	347	153	44	263	135	51
do 1877	845	455	53	594	352	59
do 1878	1,788	1,376	76	1,580	929	58
do 1879	4,068	2,038	50	1,729	1,454	84
do 1880	2,074	676	32	1,004	494	49
do 1881	2,753	937	34	1,649	776	47
do 1882	7,483	3,474	46	5,654	3,083	54
do 1883	6,063	1,794	29	4,120	1,576	38
do 1884	3,753	1,119	29	2,762	1,017	36
do 1885	1,858	584	31	653	394	60
do 1886	2,657	789	29	1,046	402	38
do 1887	2,036	451	22	585	223	38
do 1888	2,655	643	24	454	194	42
do 1889	4,416	1,530	34	1,355	608	44
do 1890	2,955	727	24	371	....	....
do 1891	3,523	840	23	....	....	....
do 1892	4,840	1,146	23	....	....	....
do 1893	4,067	691	16	....	....	....
do 1894	3,209	388	12	....	....	....
31st December, 1894	3,174	423	13	....	....	....
10 months ending 31st October, 1895	2,114	78	3	....	....	....

PATENTS.

I submit the usual statement showing the number of Letters Patent issued by the department in each year since 1874, and the number of those issued in each year which have since been cancelled.

Year.	Letters Patent.	
	Number issued.	Number cancelled.
Departmental year ending 31st October, 1874	536	6
do do 1875	492	4
do do 1876	375	4
do do 1877	2,156	13
do do 1878	2,597	32
do do 1879	2,194	57
do do 1880	1,704	41
do do 1881	1,768	11
do do 1882	2,766	11
do do 1883	3,591	16
do do 1884	3,837	24
do do 1885	3,257	18
do do 1886	4,570	17
do do 1887	4,599	26
do do 1888	3,275	34
do do 1889	3,282	30
do do 1890	3,273	20
do do 1891	2,449	35
do do 1892	2,955	27
do do 1893	2,936	16
do do 1894	2,553	15
do 31st December, 1894	2,682	16
For 10 months ending 31st October, 1895	1,836	11

As explained in former reports, the number of patents issued does not represent the whole area of land conveyed from year to year. No patents are issued to the Hudson's Bay Company for their proportion of the public lands, nor do the railway companies receive Letters Patent for the lands granted to them in aid of the construction of their respective lines. All that is necessary under the provisions of the Land Titles Act is for the Minister of the Interior to notify the registrar that certain sections or parts of sections have been granted to any railway company entitled to Dominion lands under the authority of an Act of Parliament. That notification is accepted by the registrar as if it were a crown grant in favour of the company. In the same way, upon the confirmation of the survey of any township, the law provides that a notification to the Hudson's Bay Company under the provisions of subsection 7 of section 22 of the Dominion Lands Act shall be accepted by the registrar as equivalent to letters patent in favour of the company for the lands falling to them in such a township or part of a township. This obviates much of the clerical labour connected with the issuing o patents

CORRESPONDENCE.

The following statement shows the number of letters received and sent by the department in each year since its establishment :—

Departmental Year ending 31st October.	Letters received.	Letters sent.	Total.
1874	3,482	4,150	7,632
1875	1,974	2,189	4,163
1876	2,256	3,097	5,353
1877	3,137	3,677	6,814
1878	4,642	6,009	10,651
1879	5,586	6,179	11,755
1880	8,222	9,940	18,162
1881	13,605	15,829	29,434
1882	25,500	30,300	55,800
1883	27,180	33,500	60,680
1884	27,525	33,386	60,911
1885	33,970	43,997	77,967
1886	60,964	67,973	128,937
1887	47,845	60,890	108,735
1888	43,407	52,298	95,705
1889	48,316	50,500	98,816
1890	36,200	36,008	72,208
1891	38,000	36,267	74,267
1892	41,990	42,203	84,193
1893	50,794	48,145	98,939
1894	48,619	50,840	99,459
Calendar year ending 31st December, 1894	47,558	50,508	98,066
From 1st January to 31st October, 1895	38,065	41,480	79,545

The number of registered letters received during the last-mentioned period was 2,392, and the number sent, 2,677, a total of 5,069.

OPERATIONS OF THE TOPOGRAPHICAL SURVEYS BRANCH.

The appropriation for the work of carrying on surveys of Dominion lands for the present fiscal year is $75,000, being a reduction of $25,000 as compared with the previous year. The operations of the Topographical Surveys branch of the department have therefore been restricted to the work rendered most urgent by the progress of settlement.

SUBDIVISION SURVEYS.

Small tracts of land, each consisting of a township or a part of a township, have been subdivided and set out for settlement in various parts of Manitoba and the North-west Territories, particularly in the Lake Dauphin district, in which, as I mentioned in my report last year, land is in great demand. Mr. P. R. A. Belanger, D.L.S., was the surveyor employed in this district during the summer.

Mr. C. Æ. Shaw renewed during the season some old survey lines at Turtle Mountain, while Mr. H. G. Dickson was employed for a part of the season in correcting errors in some of the original township surveys, as well as in the adjustment of the difficulties which were found to exist in connection with the laying out of the townsite of Selkirk.

As in the previous year, Mr. Thomas Fawcett performed the necessary survey work in the Prince Albert district. During the greater part of the time he was engaged in the country east of the Birch Hills, and he also subdivided several townships on the Carrot River.

In the district of Alberta, and at different points between Edmonton and the international boundary, four subdivision survey parties were at work. They were in charge of Messrs. Hubbell, Woods, Wilkins and Magrath respectively.

Mr. John Vicars continued the making of such surveys within the railway belt in British Columbia as were necessary to meet the wants of exisiting settlements. His work being much scattered the progress made was comparatively slow.

SETTLEMENT SURVEYS COMPLETED TO DATE.

Hereunder will be found the usual table of subdivision or settlement survey work completed each year since the commencement of the surveys, with the result of last season's operations added:—

—	Acres.	Number of Farms of 160 Acres each.
Previous to June, 1873	4,792,292	29,952
In 1874	4,237,864	26,487
1875	665,000	4,156
1876	420,507	2,628
1877	231,691	1,448
1878	306,936	1,918
1879	1,130,482	7,066
1880	4,472,000	27,950
1881	8,147,000	50,919
1882	10,186,000	63,662
1883	27,234,000	170,212
1884	6,435,000	40,218
1885	391,680	2,448
1886	1,379,010	8,620
1887	643,710	4,023
1888	1,131,840	7,074
1889	516,968	3,231
1890	817,075	5,106
1891	76,560	476
1892	1,395,200	8,720
1893	2,928,640	18,304
1894	300,240	1,876
1895	406,240	2,539
Total	78,245,935	489,033

IRRIGATION.

During the past year irrigation has made rapid strides in the arid portion of the North-west Territories, both in the actual construction of works for the supply of water for irrigation purposes, and in the general desire evinced by the people to acquire information regarding the means of obtaining water and constructing irrigation systems.

As was intimated in my report last year, it was found necessary to ask at the last session of Parliament for some minor amendments to the Irrigation Act, these amend-

ments being intended to facilitate and cheapen the cost of obtaining licenses for and recording the small ditches constructed by private individuals to supply their own wants. With these amendments the Act seems well adapted to present requirements, and the record and authorization under its provisions of the large number of ditches and canals mentioned below is going forward smoothly and with satisfaction both to the ditch owners and the department.

At the close of the departmental year there were 121 irrigation ditches and canals constructed and in operation in the Territories. All of these, with the exception of some six or seven in the Maple Creek district of Western Assiniboia, are situated in Southern Alberta. At the close of last year there were only some sixty ditches in operation, so it will be seen that the number has more than doubled during the past season. The completed ditches and canals comprise more than three hundred miles in length, and the area which they are capable of irrigating is about 140,000 acres. Making a fair allowance for the time spent by farmers and ranchers in constructing ditches by their own labour and with their own teams, and adding this sum to cash amounts expended by companies and individuals in the construction of the larger systems, it is found that upwards of $110,000 has been expended in Western Assiniboia and Southern Alberta in the construction of these works.

The most extensive operations carried on during the past season were those of the Calgary Irrigation Company, which constructed some twenty miles of main canal, making with what was previously completed about twenty-six miles of canal in their proposed system available for the supply of water for irrigation.

In addition to the above mentioned constructed ditches, we have received applications for authorization to construct fourteen others, which will involve the building of eighty-five miles of main canals and will irrigate 43,800 acres of land. Most of these undertakings will be rapidly pushed to completion so soon as the necessary authority has been granted under the provisions of the Act.

During the year twenty-eight applications have been received for the issue of licenses for the use of water for domestic or other purposes as prescribed by the Act, the larger number of which were filed by the Canadian Pacific Railway Company to cover the water tanks used by them at different points throughout the Territories in connection with the operation of their main line and branches. I doubt whether it was at all necessary for the company to take out licenses; but recognizing that it was in the interest of the public to facilitate the work of the department in connection with irrigation in every possible way, and realizing the importance of obtaining a complete record of all the water actually being used for the purposes designated by the statute, they have generously complied with our requests in this relation without raising any question as to their legal liability.

The past season, especially in Southern Alberta, was not a favourable one for irrigation, owing to the exceptional rainfall and cold weather, but even under these conditions the results have been satisfactory, and ditch owners report that their crops are much better than they would have been without the artificial application of water. This is no doubt due to the fact that the larger number of ditches are used for the irrigation of land producing fodder crops, and as the rains did not begin until late in the season, the crops on irrigated land had made very considerable advancement before those de-

pendent on natural conditions had begun to grow. We have adopted the principle of obtaining from each irrigator a short statement of the results secured, and propose issuing this information in the form of a condensed bulletin, so that each irrigator may have the benefit of the others' experience. It is hoped that this interchange of information regarding irrigation and kinds of crops and results therefrom, supplemented by such hints as we can give founded on methods and results in other countries, will aid our settlers in understanding a principle which is comparatively new to most of them.

ADMINISTRATION OF THE IRRIGATION ACT.

The amendments to the North-west Irrigation Act above referred to contain a provision that the memorials, plans, profiles, specifications, etc., filed in connection with applications for water rights, should be first submitted to an officer of the department (at Calgary) for examination, before being filed with the department, and as it was evident that there would be a large amount of office work in connection with the application of these provisions of the Act, it was decided in the spring to delegate these duties to Mr. J. S. Dennis, Chief Inspector of Surveys, who had during the previous year been performing this work in addition to the superintendence of the irrigation surveys. Upon his arrival in Calgary in May last, Mr. Dennis established the Irrigation Office, and his report of the season's operations, contained in one of the appendices hereto, shows how rapidly the irrigation movement is extending throughout the region, and that the office work in connection therewith is assuming large proportions. In fact, this work has grown so rapidly that it has been found necessary to keep Mr. Dennis at Calgary instead of having him return to Ottawa at the close of the summer's field work, and in October his headquarters were transferred there.

IRRIGATION SURVEYS.

The general irrigation surveys commenced last year were continued under Mr. Dennis's superintendence. The field work was performed by two divisions both working in Alberta. Division A was engaged in carrying on the general levels and dependent topographical investigations to enable the irrigable areas to be located, with measurements of the discharge of the different streams to determine the available supply for the reclamation of these areas. This division during the season also completed the location of the St. Mary's Irrigation Canal, some forty miles in length, which heads in the stream of that name near the international boundary, and is designed to irrigate an extensive area to the south and east of Lethbridge; and of the Bow River Irrigation Canal, some thirty-four miles in length, heading in the Bow River near the town of Calgary, and designed to serve the country in the vicinity of the Canadian Pacific Railway line between Calgary and Medicine Hat. These surveys were made for the purpose of proving definitely that the waters of these streams could be used for the irrigation of the areas in question, and, although the returns showing the surveys are not yet completed, it is gratifying to note that it is now made certain that large areas can be served from these canals, and that the proposed works can be constructed within reasonable financial limits.

Division B of the surveys was engaged in carrying on topographical and hydrographical investigations in the foothills country and on the eastern slope of the Rocky Mountains, which area may be said to contain the heads of all the streams which

are looked to as sources of supplies for irrigation, and it is therefore desirable that we should have some reliable information regarding this unsurveyed area to assist us in computing the available water supply and the natural facilities for conserving the same.

The information obtained by our irrigation surveys during the past season, when properly assembled in the form of plans, schedules, etc., will add greatly to our knowledge of the existing conditions in a large part of the arid region, and it is intended to follow the practice inaugurated last year of issuing this information, when complete, as a special report for the information and guidance of the department and those interested in irrigation.

The general report prepared last winter on the subject of the previous season's irrigation surveys and irrigation generally, has lately been issued; but as it is evident from the large number of applications for this report which have been received that the special edition of 1,500 copies would soon become exhausted, it is now reprinted as an appendix to this report, and will I believe be found to add greatly both to its interest and its value.

INTERNATIONAL IRRIGATION CONGRESS.

In September last the fourth International Irrigation Congress was held at Albuquerque, New Mexico. An invitation having been extended to Canada through the British ambassador at Washington to send delegates to this important gathering of those interested in irrigation, an Order in Council was passed appointing Mr. William Pearce, Superintendent of Mines, Mr. J. B. Lynch, late of the Department of Agriculture, but then a resident of Mexico, Mr. J. S. Dennis, Chief Inspector of Surveys, together with myself, to represent the Dominion. The sessions of the congress were of a most interesting and instructive character.

I take this opportunity of expressing my gratitude for the privilege thus afforded me and my co-delegates of better equipping ourselves for the duties and responsibilities falling to us respectively under the North-west Irrigation Act. At this congress we were enabled to meet and have the great advantage of personal communication with a larger number of gentlemen experienced in the science of irrigation as practised on this continent than would have been possible in any other way. The papers read at the convention and the discussions arising out of them all had a more or less direct bearing upon the problems with which in the past we have been brought face to face, and which surely await solution and decision in the future. At the same time and place was held a meeting of the Society of Irrigation Engineers, of which Messrs. Dennis and Pearce are members. At this meeting they both read papers which I can testify from the discussions which ensued upon them, and the expressions of opinion upon the part of the other delegates, were regarded by the society as of great scientific and practical value. The truth is that as the result of our attendance at this convention we were placed in possession of a large amount of material highly necessary to the proper performance of our duties, which could not otherwise have been acquired except by the issue of a commission or by some other method of collecting information which would have involved an expenditure of time and money, compared with which the outlay in both respects involved in our visit to Albuquerque must necessarily be regarded as trifling.

I cannot close this portion of my report without making hearty acknowledgment of the generous treatment which the delegates received at the hands, not only of the Irrigation Convention and the Society of Irrigation Engineers, but of the people of Albuquerque as well.

TIMBER, MINERAL AND GRAZING LANDS.

The revenue from the above sources for the first ten months of this year was $73,620.28. This does not include sales of lands containing minerals. The revenue for the corresponding ten months of last year was $90,584.46.

TIMBER.

The timber dues received amounted to $58,360.94, being less than those received for the corresponding period last year by $7,357.14. Of the revenue derived from timber, $16,642.34 was for bonuses, ground rents, royalties, and dues on timber cut from lands in the railway belt in the province of British Columbia, being a decrease of $3,186.68 compared with the first ten months of the previous year. The total revenue received from timber in Manitoba and the North-west Territories up to the 31st of October, 1895, was $1,080,047.10, and the total revenue from timber within the railway belt in British Columbia up to the same date was $267,541.55.

During the first ten months of this year 30,010,491 feet of lumber were manufactured from timber cut under license in Manitoba, the North-west Territories and within the railway belt in the province of British Columbia. In the Winnipeg agency, which comprises Manitoba and portions of Assiniboia and Saskatchewan, the following quantities of lumber were sold :—

Canadian pine (from Lake of the Woods)	34,000,000 feet.
do (from Fort William)	6,000,000 feet.
Canadian spruce (manufactured in Manitoba	12,559,083 feet.
United States pine	6,776,518 feet.
British Columbia products (approximately)	10,000,000 feet.

It will be noticed that the quantity of lumber exported from the United States into Canada was small when compared with that of Canadian manufacture, and, notwithstanding the fact, that the product from the United States comes in free of duty, Canadian millmen are supplying the country with lumber at a price which largely shuts out American competition.

Pine and spruce are selling in the Winnipeg market at $19.00 and $17.00 per thousand feet B.M. respectively. The trade has increased since an abundant harvest has been reaped.

Approximately 60,000 cords of wood were sold at Winnipeg, the price for car lots being at the rate of $3.50 per cord for tamarack and spruce, and $2.00 for poplar. Of the above quantity only 2,318 cords were imported from the United States.

Following is a comparative statement of the average prices of lumber within the several Crown timber agencies during the past eleven years. The cost of this article to the settler has been very much reduced within that time :—

Agency.	1885.	1891.	1894.	1895.
	Per M.	Per M.	Per M.	Per M.
Winnipeg	$13.50 to $25	$ 9 to $19	$17	$17 to $19
Brandon	20 to 22	13 to 15	15	15
Whitemouth	11 to 12	9 to 12	.....	10
Calgary	25 to 30	12 to 18	8 to 16	8 to 16
Fort McLeod	30	17 to 40	10	10 to 16
Lethbridge	.....	.....	9 to 16	.....
Prince Albert	30 to 45	20 to 42	10 to 25	8 to 25
Edmonton	25 to 30	10 to 20	18	13 to 16
British Columbia	.....	9 to 10	10	7 to 9

The Crown timber agent at Winnipeg and his staff of forest rangers have completed the selection of lands valuable for timber at Turtle and Moose Mountains, which are to be set apart as timber reservations with the view of securing a continuous supply for the future needs of the settlers. Work is proceeding at Riding Mountain with the same object in view.

Prairie fires during last summer were more numerous than in former years, but no forest fires of any consequence occurred, with the exception of one at Moose Mountain.

GRAZING AND STOCK RAISING.

Last winter was one of the most favourable for cattle within the recollection of the oldest settler, there being fewer storms than usual, although the temperature was somewhat lower than in previous years. The number of head of stock sold exceeded the number sold in any other year by fifty per cent, and about twenty per cent were cattle sent to Alberta within the last two years from Manitoba and other eastern points. During the present year a number of stockmen, on account of the shortage of fodder in Ontario, and the low rates offered by the Canadian Pacific Railway Company, brought several trainloads of cattle to Alberta which will be shipped to Europe so soon as they are matured.

Some shipments of saddle and coach horses have been made to Europe during the year, the price obtained being, it is stated, about $70 per head.

Mr. Pearce in his annual report points out the bright prospects awaiting those who will turn their attention to dairying, also to the raising of cattle and horses in the North-west Territories, particularly in portions of Alberta and Western Assiniboia.

The sum of $7,072.48 was received for grazing lands during the first ten months of this year, being a decrease of $10,713.41 as compared with the same period last year. This decrease in revenue was caused by some of the largest leaseholders relinquishing their leases in compliance with the request made by the Government, in order that the lands embraced within the tracts might be opened for homestead entry and scheduled to railway companies as a portion of their land subsidies. All the old leases which did not provide for the withdrawal of lands for the above mentioned purposes have been

relinquished with the exception of nine, comprising a total area of about 523,000 acres, but it is expected that the small remainder will be surrendered during the coming year. The majority of the persons and companies holding the old leases have accepted the offer made to them, namely, that they might purchase ten per cent of their leaseholds. This will afford them sufficient holdings in fee simple on which to continue their business.

The total number of ranches is increasing, but the areas leased have been much smaller the last few years, none of the tracts exceeding 6,000 acres. As a rule the lessees are settlers who acquire limited tracts adjoining or in the neighbourhood of their homesteads. The total number of leases now in force is 185, covering 904,186·73 acres.

The leases for grazing purposes of Dominion lands in Manitoba, the North-west Territories, and in the Railway Belt in British Columbia, are for a term of twenty-one years, at a yearly rental of two cents an acre, and they provide that any portion of the land leased may be withdrawn for homestead and railway purposes. As it was found that applications were being made for leases for grazing purposes of lands which proved in some instances to contain hay required for the stock of the ordinary farmer, it was thought advisable to insert a clause giving the lessee the first right upon making application to obtain a free permit each year to cut a sufficient quantity of hay for his own use, the Minister of the Interior retaining the right to issue permits to others. This ensures to the settlers who are engaged in mixed farming the hay supply which they have been accustomed to rely upon over and above the product of their own holdings.

A list of the lessees of grazing lands and the areas of each leasehold may be found in the annual report of the clerk in charge of the timber, mineral, and grazing lands branch.

EXPORT OF NORTH-WEST CATTLE.

I observed in a Montreal newspaper immediately after the close of the navigation season the following statement in regard to the cattle export business from that port during the season:

"The total shipments for the season 1895 were 96,564 head of cattle, 215,509 sheep, and 12,468 horses. Cattle show an increase of 8,960 compared with 1894. Sheep an increase of 75,745, and horses an increase of 6,845. Last year it was estimated that the average price paid to farmers was $55 per head, while this year it is $60, which makes $5,793,840 for the total number of cattle shipped this year, as against $4,818,220 last year. Sheep totalled about $1,027,040, and horses as much more."

No doubt this subject will be dealt with fully and authentically in the report of the Department of Agriculture, to the business of which it more particularly belongs; but the publication of the statement suggested to me the propriety of communicating with Mr. William Whyte, the general superintendent of the western division of the Canadian Pacific Railway, for the purpose of ascertaining from him if possible what proportion of these shipments had come from the west. In a letter dated 5th instant Mr. Whyte informs me that from the company's books he was able to state that the

following live stock shipments had been made from and through Winnipeg up to the 1st of December.—

Cattle	50,000
Hogs	10,000
Sheep	15,000
Horses	400
Total	75,400

"Of course," he adds, "these may not all have been exported from Montreal. Some may have been sold for Montreal and other points in Canada, but that is the total number of the different kinds of animals that have been shipped from Manitoba and the North-west Territories up to 1st December."

HAY.

The dues received from the 1st of January to the 31st of October last were $8,043·66, being an increase of $1,612.08 as compared with the same period of the previous year. The total number of permits issued by the agents to cut hay was 2,780. Twelve leases have been issued to cut hay on Dominion lands, and five to cut hay on school lands.

MINERALS OTHER THAN COAL.

No sales of lands containing minerals other than coal were made this year. The total area of mining locations sold up to the 1st of November, 1895, was 2,481·87 acres, from which was realized $12,892.24.

The total sum received for mining lands in the railway belt in British Columbia up to the 1st of November, 1895, was $9,042.20. No sales were made during the present year. Twenty entries were granted through the various agencies of the department —four of them being for gold locations in the Yukon country; two for gold, two for salt and three for nickel in Manitoba; five for gold, silver and copper, and two for manganese, in the North-west Territories, and two for stone quarries in British Columbia.

Mr. Pearce, superintendent of mines, reports that owing to the discoveries of minerals in the west Kootenay country and the development of the mines there, a number of prospectors during the past summer have been examining the country in the mountains in the neighbourhood of the Bow River, and that several gold quartz claims have been recorded.

COAL MINING LANDS.

The revenue from coal lands during the first ten months of this year was only $105.00. The total area sold up to the 1st of November last was 15,466.96 acres, and the total amount received therefor was $156,583.53, over $10.00 per acre on the average.

On the 11th of November of this year an Order in Council was passed authorizing the issue of permits to mine coal for domestic purposes. It was found that settlers living at a distance from coal mines being worked by persons who had purchased the same either from the Crown or from other sources were taking coal from Dominion

lands for their own use and for the use of others without permission; that they were not as a rule in a position to purchase coal lands in accordance with the provisions of the regulations; and that, as they could not obtain permission to mine coal by paying a royalty, they took it without authority. It was considered that it would be a hardship for the settlers if action were taken against them in the only way provided for by law, especially as many of them were willing to pay dues, and that some regulations should be adopted whereby they might obtain permission to mine coal on Dominion lands. The order above referred to provides that the permits issued shall be for a term of one year, and that the royalty for anthracite coal shall be twenty cents per ton, for bituminous coal fifteen cents per ton, and for lignite coal ten cents per ton.

Coal mining continues to be carried on in the North-west Territories with energy, especially at Anthracite and Canmore, and the output at the Lethbridge colliery was quite up to last year's figures. A considerable quantity was also mined at Edmonton in Alberta and in the Souris district in Assiniboia.

The following prices were received for coal at Winnipeg, being a slight reduction from last year:—

	Price per ton.
American anthracite, on car	$8 00
Canadian anthracite (North-west)	8 00
American soft coal, on car	7 00
Canadian soft coal (Lethbridge)	6 00
Canadian soft coal (Souris)	3 75

The following statement shows the sales of coal in Manitoba during the first ten months of this year:—

	Tons.
American anthracite	17,700
Canadian anthracite	11,000
American bituminous coal	700
Canadian soft coal (Lethbridge), east of Brandon	4,500
Canadian soft coal (Souris)	10,300

SCHOOL LANDS.

MANITOBA.

As indicated in my report last year, legislation was obtained at the last session of Parliament to enable the Governor General in Council to deal with certain claims to school lands in Manitoba by virtue of occupation prior to the 1st of January, 1880. These were claims which had not been brought to the attention of the Government in time to permit of their being included in the Act of 1893 (56 Victoria, chapter 18).

The terms of the Act of last session were similar to those of 56 Vic., cap. 18,—that is to say, the Minister of the Interior was empowered to grant, under the direction of the Governor in Council, homestead entry to the persons named in the Act for the quarter-sections of school lands claimed by them respectively, upon satisfactory evidence being furnished to show that they were in occupation of the lands so claimed prior to the 1st of January, 1880, and that they continued to occupy and cultivate them from

that date. Of the ten claims embraced in the Act six have been allowed, the evidence showing that the conditions of the Act had been complied with. Homestead entry will accordingly be granted in these cases for the school lands claimed, and other lands, as nearly as possible equal to them in area and value, will be selected and set apart in lieu as school lands. The remaining four cases could not be allowed, as it was found on investigation that the requirements of the Act with respect to residence on the land had not been fulfilled.

No auction sales of school lands were held in the province during the past year. Owing, however, to the number of applications received from time to time for leases of school lands in Manitoba for grazing purposes, you decided that it would be in the interests of the school endowment fund to issue leases of these lands for grazing, and so derive some revenue from them until such time as they can with advantage be offered for sale. In this view the Government of Manitoba, to whom the matter was referred, concurred, and leases are now being issued under the authority of an Order of His Excellency the Governor General in Council. The terms are similar to those contained in the leases of school lands in the Territories for the same purpose, except that the rental under the North-west leases is four cents per acre per annum, and under the Manitoba leases six cents per acre. Only three leases have been issued under this arrangement.

The receipts for the ten months ending October 31st, 1895, from payments on account of maturing instalments on previous sales were $36,449.44.

NORTH-WEST TERRITORIES.

No auction sales of school lands in the Territories were held during the past year, and as all the previous sales were completed some years ago, with one exception, there are no payments to report on this account. Eleven grazing leases affecting such lands have been issued and are in force, the rental being four cents per acre.

The following statement shows the position on the 31st October, 1895, of the school lands funds of Manitoba and the North-west Territories.

Manitoba School Lands Fund.

	D.	Cr.
	$ cts.	$ cts.
Balance, 31st December, 1894		337,523 99
Sales, 10 months ending 31st October, 1895		36,449 44
Timber, hay and grazing, 10 months ending 31st October, 1895		2,076 53
Interest to 30th June, 1895		6,341 14
Cost of management at Ottawa, 10 months to 31st October, 1895	647 91	
Expenses, being examinations, valuations, auctioneers' fees, printing, advertising, &c.	163 80	
Interest paid to Manitoba Government to 30th June, 1895	6,383 00	
Balance, 31st October, 1895	375,196 39	
	382,391 10	382,391 10

Assiniboia School Lands Fund.

——	Dr.	Cr.
	$ cts.	$ cts.
Balance, 31st December, 1894	.....	5,177 09
Hay, timber and grazing, 10 months ending 31st October, 1895	.....	553 12
Interest to 30th June, 1895	.....	88 64
Cost of management at Ottawa, 10 months to 31st October, 1895	323 96	.....
Balance, 31st October, 1895	5,494 89	.....
	5,818 85	5,818 85

Alberta School Lands Fund.

——	Dr.	Cr.
	$ cts.	$ cts.
Balance, 31st December, 1894	.....	52,172 49
Hay, timber and grazing, 10 months ending 31st October, 1895	.....	451 53
Interest to 30th June, 1895	.....	911 76
Cost of management at Ottawa, 10 months ending 31st October, 1895	323 96	.....
Expenses, being examinations, valuations, auctioneers' fees, printing, advertising, &c	4 68	.....
Balance, 31st October, 1895	53,207 14	.....
	53,535 78	53,535 78

Saskatchewan School Lands Fund.

——	Dr.	Cr.
	$ cts.	$ cts.
Balance, 31st December, 1894	.....	669 99
Hay and timber, 10 months ending 31st October, 1895	.....	69 55
Interest to 30th June, 1895	.....	11 82
Balance, 31st October, 1895	751 36	.....
	751 36	751 36

STATEMENT showing Receipts on account of Dominion Lands from 1st July, 1872, to 30th June, 1895.

Fiscal Year.	Homestead Fees.	Pre-emption Fees.	Improvements.	Sales.		Mapsales, Office and Registration Fees, &c.	Surveyors' Examination Fees.	Miscellaneous, including Trust.	Inspection, Cancellation and Sundry Fees.	Timber Dues.	Grazing Lands.		Hay Permits, Mining Fees, Stone Quarries, &c.		Rocky Mountain Park of Canada.	Colonization Lands.		Gross Revenue.	Refunds.	Net Revenue.
				Cash.	Scrip.						Cash.	Scrip, &c.	Cash.	Scrip.		Cash.	Scrip.			
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1872-73	6,960 00			19,170 20						109 25								26,239 45		26,239 45
1873-74	7,310 00			19,834 75				125 50		2,710 55								29,980 80		29,980 80
1874-75	11,510 00			13,666 90		129 00				2,335 25								27,641 15		27,641 15
1875-76	4,680 00			3,478 94	320 00					387 00								8,865 94		8,865 94
1876-77	2,250 00			1,085 86	136,955 16	4 00		100 00	40 00	320 00								140,755 02		140,755 02
1877-78	14,540 00			2,794 86	120,159 54		180 00		290 00	1,620 00								139,584 40		139,584 40
1878-79	17,690 00			4,998 39	210,904 84	81 00	310 00	13 70	410 00	325 00								234,732 93		234,732 93
1879-80	41,255 00	10,241 43		45,708 97	81,685 86	245 40	580 00	183 25	1,780 00	25,121 46								206,801 37	4,636 08	202,165 29
1880-81	20,450 00	10,801 75	269 00	71,170 17	70,828 30	985 49	420 00	37 58		32,028 34								206,990 54	5,038 22	201,952 32
1881-82	54,155 00	39,843 90	1,758 00	1,240,328 27	50,590 84	3,036 45	890 00	58 10		58,753 14	2,245 00		40 00			354,036 17		1,805,734 87	10,687 55	1,795,047 32
1882-83	73,015 00	54,725 00	7,114 91	516,092 21	33,638 40	3,109 50	890 00	501 77		90,066 46	22,844 43		913 91			248,492 01		1,051,403 60	8,746 05	1,042,657 55
1883-84	41,580 00	28,810 00	2,596 11	424,863 36	40,919 67	1,289 55	530 00	45,766 53	1,713 45	147,983 10	11,370 60		640 90			253,713 40		1,001,776 67	9,220 50	992,556 17
1884-85	25,645 00	17,100 00	2,328 75	199,275 32	45,875 60	1,621 82	370 00	50,068 57	2,685 00	87,474 99	17,089 75		815 63			1,214 22		451,564 65	12,070 85	439,493 80
1885-86	26,110 00	14,371 00	1,101 50	76,140 41	214,657 97	1,339 34	360 00	20,070 00	5,025 00	64,820 31	29,562 51	3,131 08	1,284 83					457,973 95	63,389 12	394,584 83
1886-87	19,614 00	6,887 93	1,971 55	48,175 76	337,640 19	1,171 39	240 00	44,561 00	7,778 40	65,111 74	14,242 77	39,487 67	1,570 40	80 00				588,532 80	19,543 16	568,989 64
1887-88	23,691 00	4,830 00	1,918 35	52,238 36	313,522 67	1,660 75	240 00	20,591 41	12,078 53	94,964 55	5,922 47	23,023 28	2,273 73	80 00	2,951 58		10,000 00	569,986 68	6,277 66	563,709 02
1888-89	39,460 00	10,550 00	4,128 48	57,513 16	318,238 57	1,410 16	220 00	10,389 57	20,402 50	90,290 00	2,207 69	16,802 63	3,946 55		2,528 73		16,000 00	594,088 04	5,226 23	588,861 81
1889-90	35,920 00	8,580 00	3,250 54	54,896 85	228,744 47	2,099 07	190 00	3,316 23	20,232 50	84,642 95	1,305 57	9,021 63	9,242 08		1,094 37			462,536 26	8,209 74	454,326 52
1890-91	29,164 10		6,302 61	91,664 98	171,425 14	1,854 78	88 00	7,951 05	14,712 50	102,902 71	3,079 55	16,193 77	8,628 44	160 00	2,397 35	5 28	4,460 50	460,990 76	7,195 27	453,795 49
1891-92	46,994 00		6,472 31	108,901 01	97,822 41	2,147 31	135 00	29,898 49	23,104 50	106,461 35	3,726 80	17,222 60	5,616 85		3,648 45			452,151 08	15,291 39	436,859 69
1892-93	37,689 74		7,113 50	93,671 67	77,231 18	975 20	82 00	18,509 35	22,014 00	105,865 24	6,380 80	11,542 39	6,266 13		4,983 23			392,324 43	18,314 97	374,009 46
1893-94	36,462 26		3,497 76	53,254 71	27,840 96	973 11	40 00	13,457 09	11,097 00	81,290 51	5,740 79	7,687 86	6,243 15		2,523 92			250,069 12	4,544 01	245,525 11
1894-95	29,664 88		3,567 90	37,293 71	23,269 62	695 99		6,271 77	6,566 90	74,079 20	5,353 72	8,628 00	5,229 54		2,321 87			202,983 10	4,365 99	198,617 11
	645,809 98	206,741 01	53,391 27	3,236,218 82	2,602,271 39	24,829 22	5,765 00	271,870 96	149,930 28	1,319,663 10	131,072 45	152,740 91	52,712 14	320 00	22,449 50	857,461 08	30,460 50	9,763,707 61	202,756 79	9,560,950 82

Department of the Interior.

IMMIGRATION.

The number of people arriving in Canada by way of Halifax and Quebec during the past six years, and declaring their intention to settle in the country, was as follows :—

1890	24,409
1891	26,894
1892	27,810
1893	29,455
1894	20,680
1895	18,617

There was a falling off for 1895 of 2,000 as compared with 1894. The percentage of decrease, however, was far greater during the early part of the season than it was later on, which I think may be taken as a somewhat hopeful sign. The High Commissioner in dealing with the subject, while admitting that he does not for a moment intend to infer that the movement from Great Britain to Canada is as large as he would like to see it, maintains that we have had a very fair share of the *bonâ fide* emigration, the settlers being of a good class. The difficulties in the way of obtaining tenant farmers are fully and well described in the High Commissioner's report, and I am convinced that all that can be done at present is to maintain the interest in Canada which has been created and to keep in touch with the agricultural community— the means taken to this end being, in my opinion, well conceived and well carried out. While there has been a slight falling off in the immigration to Canada, the statistics go to show that the steamship passenger business between Europe and the United States has experienced a distinct revival. The report of the Bureau of Statistics of the United States Treasnry issued in November, 1895, gives the following as the total immigrant arrivals in the United States for the periods mentioned :—

1st July,	1892,	to 30th June,	1893	497,656
"	1893	"	1894	311,605
"	1894	"	1895	276,136
"	1895,	to 30th Nov.,	1895	147,980

The first eleven months of the year 1895 show a decided improvement, however which the figures quoted do not indicate, having reference as they do to the fiscal period. But the High Commisssioner and our European agents are unanimous in the conclusion that the increase in arrivals from Europe at United States ports is no indication of a revival of *bonâ fide* emigration. It is explained that the low steamship rates prevailing during last season induced a large number of workers in the United States to visit the Old Country, the return fare being about £4, and now that there are indications of increased business activity and these people are returning, their numbers go to swell the reported immigrant arrivals.

STEAMSHIP RATES.

The steamship rates from European ports to points on the continent of America generally were very much lower during the past season than they have been for many years, but the companies have recently come to an understanding on this sub-

ject, and have not only restored the rates to the standard of the last few years but have considerably increased them, the advance being altogether about $15 per ticket. What the effect of this on the emigration of next year may be it is hard to determine. The High Commissioner and our European agents do not anticipate that it will be harmful; but the railway authorities on this continent seem to take the other view, and in correspondence which has taken place with them have expressed the fear that the increase in the rate will go a long way to counterbalance the good effect which we had hoped would be produced by the plentiful crops of the past season. It is of importance to note that under the new arrangement a slight discrimination in favour of Canada has been agreed upon. The High Commissioner, with the best means at his disposal of coming to an accurate conclusion, takes a hopeful view of the situation, remarking that trade is reviving in Great Britain, which is always in favour of increased emigration.

FARM PUPIL BUSINESS.

I think it important to quote verbatim, for the purpose of emphasizing, if possible, the following observations of the High Commissioner :—

"The farm pupil business still continues to flourish, I am sorry to say, notwithstanding all our efforts to put a stop to it. Within the last year one or two associations have been particularly active, but several cases have come under my notice in which difficulties have occurred owing to the promises made to the young men not having been carried out. Innumerable warnings have been issued in the press, and that, of course, is the only means by which the matter can be kept before the public. I am now arranging to again call attention to the matter."

IMMIGRATION APPROPRIATION.

The High Commissioner concludes his report with a paragraph which I also think it important to quote in full :—

"I have only to assure you in conclusion that I take the keenest possible interest in the promotion of emigration to Canada, and that I shall continue to do all that I can in that direction. I have no hesitation in saying that I regard the filling up of the vacant lands in Manitoba and the North-west Territories, as well as in the other provinces of Canada, as one of the most important matters—if not the most important—that can engage the attention of the Government of which you are a member. You know we have been handicapped considerably for some time past in regard to the smallness of the funds that are available for emigration purposes. I do hope the Government will be able to induce Parliament to put aside annually a much larger sum for immigration work, and that an even larger proportion of it than usual may be placed at my disposal, for it is in this country and on the continent that expenditure is needed. If we ever expect to get a large emigration we must keep Canada continually before the world, and especially before those sections of the population which we desire to reach."

THE REPATRIATION MOVEMENT.

The secretary of the Repatriation Society at Montreal, which receives an annual subvention from the department, reports that 1,850 people registered their names at his office during the eleven months from January to November, inclusive; that more than

a dozen special excursions were organized by the society to take these people out to regions in the province of Quebec suitable for colonization; and that most of the people referred to have actually become settlers in the districts thus visited. The society is doing a two-fold work in diverting intending emigrants from their purpose by showing them the available places for settlement near home and in their own country, and by inducing as many as possible of those who have already emigrated to the States to come back to Canada.

The Reverend Father Morin is as usual doing good work in connection with this movement and makes an interesting report. He states that fifteen families came in from Kansas and twelve from Minnesota, altogether one hundred and forty-four souls, as the result of a journey he made last winter to the United States, and in addition to this thirty families have joined his colony from other portions of the United States and eastern Canada. Father Morin gave eighteen lectures in the States last winter, besides visiting a great many people in their homes.

DESTRUCTION OF IMMIGRATION PREMISES AT HALIFAX.

A double fire disaster befell the department at Halifax last summer. The immigration buildings, as well as the buildings of the Intercolonial Railway at the deep water terminus, were completely destroyed by fire. Both the railway and the immigration officials found temporary quarters at Richmond, but the staff had only been there a short time when their offices were again burnt down. Temporary accommodation was then secured at the Cunard wharf. The Intercolonial authorities have displayed most commendable energy and activity in reconstructing their premises at the deep water terminus. During the latter part of August I had the advantage of visiting the scene of operations, and of consulting with Mr. Archibald, the chief engineer of the Intercolonial Railway, and with Mr. Dodwell, the engineer at Halifax of the Public Works Department, as to the site and character of the accommodation to be afforded for the reception of immigrants. Since then, an arrangement has been consummated with the Department of Railways and the Department of Public Works by which the necessary piling and other preliminary work for the reconstruction of the immigration building on a greatly improved plan has been completed, and the erection of the build ing itself will be commenced forthwith. I greatly fear, however, that this building will not be finished until the season of immigration via the port of Halifax is well advanced. Meantime, by the generous co-operation of the Intercolonial Railway authorities, arrangements have been made which permit incoming immigrants to land with the least possible inconvenience and discomfort.

RESOURCES OF THE PROVINCES.

Your memorandum on the advantages offered to settlers by the various provinces of Canada, which was prepared last year, and transmitted by His Excellency the Governor-General to the Home Government, was presented to Parliament, and afterwards published as an Imperial State Paper. The High Commissioner speaks of its contents very favourably, and says that it has served a very useful purpose.

CROPS IN MANITOBA AND THE NORTH-WEST TERRITORIES.

The grain crops of Manitoba and the Territories last season can only be fitly described as phenomenal. The December crop bulletin issued by the Government of Manitoba gives the following details as regards the province :—

——	Acreage.	Yield.	Total product.
Wheat	1,140,276	27·86	31,775,038
Oats	482,658	46·73	22,555,733
Barley	153,839	36·69	5,645,036
Flax, rye and pease	.....	.....	1,390,665
Potatoes	16,716	243·5	4,042,562
Roots	.....	.....	2,285,283

The total grain crop for the province amounts to 61,366,472 bushels, to which should be added 6,327,845 bushels of potatoes and roots.

Speaking of the yield under the various headings, the bulletin describes the wheat crop as "immense"; the oat crop as "enormous"; the barley crop as "good" and "heavy"; and the season is stated to have been "specially favourable for the flax crop." The yield per acre for the province of the latter was on the average 15½ bushels per acre.

The Government of the North-west Territories has not taken any means to collect the data respecting the crops which are furnished by the bulletins of the province of Manitoba, and it is difficult to obtain reliable figures. The best authorities, however, compute the wheat crop at about 5,000,000 bushels, oats in the neighbourhood of 2,000,000 bushels, and barley a little over 200,000 bushels.

It is assumed that there are about 31,000 farmers and ranchers in Manitoba and the Territories, and it is worth while at this point to summarize the information already given in this report as to the product of their farms and ranges during the past twelve months. As already stated, the stock shipments from and through Winnipeg up to the 1st of December were: cattle, 50,000 head, hogs, 10,000, sheep, 15,000 and horses, 400. The total crop of grains and roots was, for the province of Manitoba, 67,674,317 bushels, and for the Territories 7,200,000 for wheat, oats and barley alone. I scarcely care to make an estimate of the value to the farmers of this enormous product in grain and animals, to which, in order to arrive at their actual receipts, it would be necessary to add the butter, cheese, eggs, poultry and the smaller products of the farm; but I think it is quite safe to say that no equal number of farmers on the face of the earth have during the past year had their labours so richly rewarded by a beneficent Providence.

The figures quoted in regard to the export of animals are derived, as already explained, from the books of the Canadian Pacific Railway Company, and the railways engaged in the carrying trade of Manitoba and the North-west give concurrent testimony which proves the reliability of the statistics in regard to the crop product beyond the shadow of a doubt. Up to the close of the first week of December, the date when the last steamboat left Fort William, 9,065,978 bushels of wheat had been received at that point, in addition to which about 1,500,000 bushels had been shipped by the Northern Pacific Railway, and 1,000,000 bushels more had gone out of the province in the form of flour, making the total shipments east and south up to that date about

11,500,000 bushels. The inspections made up to that period showed the crop to grade 60½ per cent made up of Nos. 1, 2 and 3 hard, and the balance of various grades. On account of the very large crop, however, and the unprecedented labour connected with its harvesting, there was less ploughing done last autumn than for several years past, and unless next spring should prove unusually favourable there is a danger that the acreage prepared for crop will be less than for last year.

CROPS STATISTICS OF MANITOBA.

I quote as of general interest the following table from the Manitoba crop bulletin, being a summary of the crop statistics for the 13 years during which the system has been in operation.

WHEAT.

Year.	Acreage.	Yield per acre.	Total Yield.
1883	260,842	21·80	5,686,355
1884	307,020	20·11	6,174,182
1885	357,013	20·80	7,429,440
1886	384,441	15·33	5,893,480
1887	432,134	27·7	12,351,724
1888*			
1889	623,245	12·4	7,201,519
1890	746,058	19·65	14,665,769
1891	916,664	25·3	23,191,599
1892	875,990	16·5	14,453,835
1893	1,003,640	15·56	15,615,923
1894	1,010,186	17·	17,172,883
1895	1,140,276	27·86	31,775,038

OATS.

Year.			
1883	215,431	44·	9,478,964
1884	133,044	30·55	4,064,494
1885	157,026	40·53	6,364,263
1886	161,030	25·15	4,048,904
1887	155,176	46·2	7,265,237
1888*			
1889	218,744	16·8	3,415,104
1890	235,534	40·2	9,513,443
1891	305,644	48·29	14,762,605
1892	332,974	35·	11,654,090
1893	388,529	25·28	9,823,935
1894	413,686	28·8	11,907,854
1895	482,658	46·73	22,555,733

* No statistics collected in 1888.

BARLEY.

Year.	Acreage.	Yield. per acre.	Total Yield.
1883	60,281	30·	1,898,430
1884	40,936	32·83	1,363,928
1885	52,189	29·	1,113,481
1886	69,565	18·70	1,300,865
1887	56,110	34·31	1,925,231
1888*			
1889	80,238	13·1	1,051,551
1890	66,035	31·33	2,069,415
1891	89,828	35·6	3,197,876
1892	97,644	29·	2,831,676
1893	114,762	22·11	2,547,653
1894	119,528	25·87	2,981,716
1895	153,839	36·69	5,645,036

RAILWAY CONSTRUCTION.

The following statement shows the mileage of railways constructed and in operation at this date in Manitoba, the North-west Territories and British Columbia.

MANITOBA AND NORTH-WEST TERRITORIES.

CANADIAN PACIFIC RAILWAY.

Main Line.

1½ miles west of Ingolf to Hector, eastern boundary of British Columbia	1,065·50

Branches.

Emerson—Winnipeg junction to Emerson	64·50
Selkirk—Winnipeg to West Selkirk	22·50
Stonewall—Air line junction to Stonewall	18·
Gretna—Rosenfeldt to Gretna	13·70
Pembina Mountain—Winnipeg junction to Manitou	100·10
Souris branch and extensions	412·10
Manitoba South-western Colonization (leased to C.P.R.)	217·80
Manitoba & North-western	234·50
Saskatchewan & Western	15·47
Northern Pacific & Manitoba	265·64
Winnipeg & Great Northern (formerly Winnipeg & Hudson's Bay)	40·00
Great North-west Central	50·93
Qu'Appelle, Long Lake & Saskatchewan	253·96
Calgary & Edmonton	295·07
Alberta Railway & Coal Company—	
Dunmore to Lethbridge	109·50
Lethbridge to International Boundary	64·62
Total	3,243·89

*No statistics collected in 1888.

BRITISH COLUMBIA.

Canadian Pacific Railway, Main Line	515·90
New Westminster Branch C. P. R	8·20
Vancouver to Coal Harbour C. P. R	1·20
Mission Branch C. P. R	10·10
Columbia & Kootenay (leased to C. P. R)	27·70
Shuswap & Okanagan (leased to C. P. R.)	51·00
Esquimalt & Nanaimo	78·00
Nakusp & Slocan (leased to C. P. R.) extension to Sandoa, five miles under construction	37·00
Nelson & Fort Shepard	55·00
Victoria & Sidney	16·26
Revelstoke & Arrowlake Branch C. P. R (12¾ miles more under construction)	15·00
Total	815·36
Grand Total of Mileage in Manitoba, the North-west Territories and British Columbia	4,059·25

ROCKY MOUNTAINS PARK.

Park V. consists of the report of the superintendent of the Rocky Mountains park. In the season of 1894 there was a considerable decrease in the number of visitors to the park as compared with the previous year, and in my last report I attributed this decrease to the general depression in business and the consequent scarcity of money prevailing in the countries from which tourist travel chiefly comes. In that year the number of visitors to the park was only 4,734, but in 1895 there were 4,924, and the superintendent remarks that the many attractions afforded by the mountains for the tourist and sportsman are fast becoming known, each year bringing additional numbers, who spend the summer months, for the pure love of adventure in exploring the several passes and scaling the mountain peaks. Numbers of these persons are not satisfied with a mere cursory examination of the country covered by their trip, but they carry on as well a rough survey of the region passed over, and on their return at the end of the season produce very useful maps and reports of their summer's work, which find their way into scientific publications in England and the United States.

The spring of 1895 was late, and the frequent showers of rain prevented the possibility of any local fires. In spite, however, of the rain storms in the spring, the rivers in the park did not rise to more than their normal height, and no damage was done of any account.

The superintendent of the park, in a recent communication, calls attention to the fact that the number of visitors to the Rocky Mountains park of Canada is twice as great as the number of visitors reported by the superintendent of the Yellowstone park, in the United States. The figures for the past six years are as follows:—

Year.	Yellowstone Park.	Rocky Mountains Park of Canada.
1890	3,904	5,000
1891	3,577	7,250
1892	3,645	5,394
1893	3,076	6,846
1894	1,635	4,734
1895	2,470	4,924

The comparison is rendered still more striking by the fact that it is now twenty-three years since the Yellowstone park was set apart by Act of Congress as a public pleasure ground, while our Canadian Park only came into existence on the 23rd of June, 1887, a little over eight years ago.

NORTH-WEST TERRITORIES.

In Part VI. will be found the report of His Honour Lieutenant Governor Mackintosh concerning the administration and general affairs of the North-west Territories for the year 1895. The Lieutenant Governor states that a noticeable improvement in the condition of the agricultural communities of the Territories is observable, live stock being in demand at very fair prices, while the bounteous harvest has created a feeling of hopefulness and contentment. Unfortunately, in some portions of Northern Alberta the wheat was damaged by frost. The sale of cattle at good prices increased fully one-third over the year 1894, and the noticeable increase in the products known as mixed farming commodities is extremely promising.

A Territorial exhibition was held in Regina in the month of August last which was in all particulars a very gratifying success. I would call special attention to what His Honour the Lieutenant Governor says in his report about this exhibition, as I am sure that his statements and statistics will prove interesting to all who are interested in the progress of the North-west Territories.

The number of schools in the Territories has considerably increased. The number of pupils attending the several schools in August, 1894, was 8,926, and in August, 1895, was estimated at 10,003.

DISTRICT OF KEEWATIN.

The report of His Honour Lieutenant Governor Schultz on the affairs of the district of Keewatin to the end of August last, at which date his administration of the district closed, will be found in Part VII. His Honour expresses his feeling of satisfaction that, during his seven years of administration, not a single crime of a serious character has been committed throughout the great extent of the district of Keewatin, and that there has been during that period almost an entire absence of slight offences, a condition of affairs which he attributes largely to the exclusion of intoxicants.

The inland fisheries (whitefish and lake trout) continue to supply the wants of the Cree Indians and others. Upon this subject of the food supply of our more northern aboriginal inhabitants, His Honour calls attention to the fact that the experiment now being carried on by the Government of the United States on the west coast of Alaska to domesticate the reindeer has been a success. This he considers interesting, as he thinks that the exigency which necessitated that experiment may arise in the case of our own people within the Arctic circle, unless measures are taken to preserve the sea animals which have hitherto furnished a supply of food for the inhabitants of these regions.

THE YUKON COUNTRY.

In the year 1887, the Hon. Thomas White, then Minister of the Interior, authorized the organization of an expedition having for its object the exploration of that region of the North-west Territories of Canada which is drained by the Yukon River. The

work was entrusted to Dr. George M. Dawson, now the Director of the Geological Survey, and Mr. Wm. Ogilvie, the well known explorer and surveyor. Dr. Dawson devoted the whole of that season, and Mr. Ogilvie a period covering nearly two years, to obtaining geological, topographical, and general information, chiefly respecting the tract of country lying adjacent to the 141st meridian of longitude, which by the Treaty of St. Petersburg is designated as the boundary line from Mount St. Elias to the Arctic Ocean between Alaska and the adjoining possessions of the British Crown which now form part of the North-west Territories of Canada.

The explorers found that in proximity to the boundary line there existed extensive and valuable placer gold mines, in which even then as many as three hundred miners were at work. Mr. Ogilvie determined, by a series of lunar observations, the point at which the Yukon River is intersected by the 141st Meridian, and marked the same on the ground. He also determined and marked the point at which the western affluent of the Yukon, known as Forty Mile Creek, is crossed by the same meridian line, that point being situated at a distance of about twenty-three miles from the mouth of the Creek. This survey proved that the place which had been selected as the most convenient, owing to the physical conformation of the region, from which to distribute the supplies imported for the various mining camps, and from which to conduct the other business incident to the mining operations—a place situate at the confluence of the Forty Mile Creek and the Yukon, and to which the name of Fort Cudahy has been given—is well within Canadian territory. The greater proportion of the mines then being worked Mr. Ogilvie found to be on the Canadian side of the International boundary line, but he reported the existence of some mining fields to the south, the exact position of which with respect to the boundary he did not have the opportunity to fix.

The number of persons engaged in mining in the locality mentioned has steadily increased year by year since the date of Mr. Ogilvie's survey, and it is estimated that at the commencement of the past season not less than one thousand men were so employed. Incident to this mineral development there must follow a corresponding growth in the volume of business of all descriptions, particularly the importation of dutiable goods, and the occupation of tracts of the public lands for mining purposes which according to the Mining Regulations are subject to the payment of certain prescribed dues and charges. The Alaska Commercial Company, for many years subsequent to the retirement of the Hudson's Bay Company, had a practical monopoly of the trade of the Yukon, carrying into the country and delivering at various points along the river, without regard to the International boundary line or the customs laws and regulations of Canada, such articles of commerce as were required for the prosecution of the fur trade and latterly of placer mining, these being the only two existing industries. With the discovery of gold, however, came the organization of a competing company known as the North American Transportation and Trading Company, having its headquarters in Chicago and its chief trading and distributing post at Cudahy. This company has been engaged in this trade for over three years, and during the past season despatched two ocean steamers from San Francisco to St. Michaels, at the mouth of the Yukon, the merchandise from which was, at the last mentioned point, transhipped into river steamers and carried to points inland, but chiefly to the company's distributing centre within Canadian territory. Importations of considerable value, consisting of the immediately requisite supplies of the miners and their

tools, also reach the Canadian portion of the Yukon district from Juneau, in the United States, by way of the Taiya Inlet, the mountain passes, and the chain of water ways leading therefrom to Cudahy. Upon none of those importations had any duty been collected, except a sum of $3,248.80 paid to Inspector Constantine in 1894, by the North American Transportation and Trading Company and others, and it is safe to conclude, especially when it is remembered that the country produces none of the articles consumed within it except fresh meat, that a large revenue was being lost to the public exchequer under the then existing conditions.

The Right Reverend W. C. Bompas, Bishop of the Anglican Diocese of Selkirk, whose headquarters and residence are situate near the place known as Cudahy, and who has devoted many years to the work of civilizing and christianizing the native Indian population of that remote district, has in a series of letters called attention to the existence, on a large scale, of an illicit traffic in intoxicating liquors, and the unsatisfactory social conditions produced by the bringing together of so many men of different nationalities at a spot where the means of enforcing law and order and of protecting life and property were so insufficient. These representations have received the strongest confirmation from other trustworthy sources, among which may be specially mentioned the officers of the North American Transportation and Trading Company.

For the purpose of ascertaining officially and authoritatively the condition of affairs to which the correspondence referred to in the next preceding paragraph relate, the Honourable the President of the Privy Council, during the spring of 1894, despatched Inspector Charles Constantine, of the North-west Mounted Police Force, accompanied by Sergeant Brown, to Fort Cudahy and the mining camps in its vicinity. The report made by Mr. Constantine on his return established the substantial accuracy of the representations already referred to. The value of the total output of gold for the season of 1894 he estimated at $300,000, a very large sum considering the relatively short period to which mining operations are, by the nature of the climate, confined.

The facts recited clearly establish—first, that the time had arrived when it became the duty of the Government of Canada to make more efficient provision for the maintenance of order, the enforcement of the laws, and the administration of justice in the Yukon country, especially in that section of it in which placer mining for gold is being prosecuted upon such an extensive scale, situated near to the boundary separating the North-west Territories from the possessions of the United States in Alaska; and, second, that while such measures as were necessary to that end were called for in the interests of humanity, and particularly for the security and safety of the lives and property of the Canadian subjects of Her Majesty resident in that country who are engaged in ligitimate business pursuits, it was evident that the revenue justly due to the Government of Canada, under its customs, excise and land laws, and which would go a long way to pay the expenses of government, was being lost for the want of adequate machinery for its collection.

Accordingly in June last a detachement of twenty members of the Mounted Police Force including officers was detailed for service in that portion of the North-west Territories. The officer in command, in addition to the magisterial and other duties he is required to perform by virtue of his office and under instructions from the Department of Mounted Police, was duly authorized to represent where necessary, and until other arrangements can be made, all the departments of the Government having

interests in that region. Particularly he is authorized to perform the duties of Dominion lands agent, collector of customs, and collector of inland revenue. At the same time you caused instructions to be given Mr. William Ogilvie, the surveyor referred to as having, with Dr. Dawson, been entrusted with the conduct of the first Government expedition to the Yukon, to proceed again to that district for the purpose of continuing and extending the work of determining the 141st meridian, of laying out building lots and mining claims, and generally of performing such duties as may be entrusted to him from time to time. Mr. Ogilvie's qualifications as a surveyor, and his previous experience as explorer of this section of the North-west, peculiarly fit him for the task.

As it appears quite certain, from the report made by Mr. Ogilvie on his return to Ottawa in 1889, and from the report of Mr. Constantine, that the operations of the miners are being conducted upon streams which have their sources in the United States Territory of Alaska, and flow into Canada on their way to join the Yukon, and as doubtless some of the placer diggings under development are situated on the United States side of the boundary, it is highly desirable, both for the purpose of settling definitely to which country any land occupied for mining or other purposes actually belongs, and in order that the jurisdiction of the courts and officers of the United States and Canada, for both civil and criminal purposes, may be established, that the determination of the 141st meridian west of Greenwich from the point of its intersection with the Yukon, as marked by Mr. Ogilvie in 1887-88, for a considerable distance south of the river, and possibly also for some distance to the north, should be proceeded with at once. Mr. Ogilvie's instructions require him to go on with the survey with all convenient speed, but in order that this work may be effective for the accomplishment of the object in view the co-operation of the Government of the United States is necessary. Correspondence is in progress through the proper authorities with a view to obtaining this co-operation. It may be mentioned that a United States surveyor has also determined the points at which the Yukon River and Forty Mile Creek are intersected by the 141st meridian. A comparison of the results of this survey with those of that performed by Mr. Ogilvie shows that on the Yukon there is a trifling discrepancy between the two amounting to 618½ feet. On Forty Mile Creek the difference only amounts to 6·59 feet. This is the highest testimony which could be offered to the accuracy of the work of both Mr. Ogilvie and the United States surveyor, considering the conditions and circumstances under which that work was done.

ORDNANCE AND ADMIRALTY LANDS.

The condition of the accounts of sales and rents of ordnance and admiralty lands has much improved during the last year. There has been a substantial reduction made in the amount of arrears due by purchasers and tenants of these lands. In 1894 these arrears amounted to $39,461.69, and they have now been reduced to $29,060.78. Of this amount $13,350 is due by the province of Quebec for lands situated in the city of Quebec held by the Provincial Government under lease, and although in arrear is undoubtedly a good asset.

LEGISLATION.

During the last two sessions of Parliament 15 Acts, containing a total of 285 sections, were passed, having relation to the business of the Department of the Interior. Of these, perhaps, the most important were "The Land Titles Act, 1894," which was

consolidation of all the previous enactments respecting the title to land in the North-west territories, and "The North-west Irrigation Act." The latter Act, a brief review of which was given in last year's report, was amended in several respects at the last session of Parliament. The particulars of these changes will be found fully discussed in the present report under the head of "Irrigation." Other important measures were the amendments made in both years to the North-west Territories Act, and the "Unorganized Territories Game Preservation Act, 1894," which latter enactment was the result largely of reports made to the department by Mr. William Ogilvie, D.T.S., whose work for a number of years has led him into the remoter districts of the Territories. The representations which had reached the department from time to time as to the wilful extermination of game in these districts were confirmed by Mr. Ogilvie's personal observation, and it was considered advisable to obtain legislation which would afford some means of preventing further unnecessary destruction of game.

Besides the legislation in regard to railway land subsidies passed in 1894, the land subsidy of the Canadian Pacific Railway Company was the subject of special legislation, the effect of which was given in last year's report under the head of "Irrigation."

Short measures amending the Dominion Lands Act were passed in both 1894 and 1895, and in the former session an Act was passed extending the time for the application of military bounty land warrants up to the first day of January next.

The Legislative Assembly of the North-west Territories having dealt with the subject of homestead exemption, it was deemed advisable to repeal the legislation of the Parliament of Canada on this subject and to confirm what had been done by the Legislative Assembly. This forms the subject of the Homestead Exemption Act of 1894.

Power was taken last session to enter into an agreement with the Government of British Columbia for the settlement of the matters remaining undisposed of relating to the lands in the railway belt in that province. This Act is known as "The Railway Belt Lands Act, 1895." The negotiations arising out of this authorization are in an advanced stage at the date of writing, and are likely to be successfully concluded at an early day.

The subject of roads and road allowances in the province of Manitoba was also passed upon by Parliament last session, one of the chief provisions of the Act in this relation being that roads within the limits of organized municipalities in the province may be closed up, or their direction varied, upon obtaining the consent of the Lieutenant Governor in Council. The law previously in force had prescribed that while such roads were the property of the Crown in right of the province, they were not to be closed up or their direction varied without the consent of the Governor in Council, and this is still the case as regards all roads in those portions of the country where municipalities have not been organized.

NEW PROVISIONAL TERRITORIAL DISTRICTS.

On the 26th July last an Order in Council was passed dividing the whole of the unorganized and unnamed districts of the North-west Territories into provisional territorial districts. The names of these districts are Ungava, Franklin, Mackenzie and Yukon.

Department of the Interior.

BRITISH COLUMBIA HOMESTEAD REGULATIONS.

Up to the 1st of January, 1891, the whole of the agricultural lands in the railway belt in British Columbia were open to homestead entry, on the terms and conditions prescribed by the regulations of the 17th September, 1889, and amendments thereto. On the date mentioned the privilege of homestead entry was withdrawn so far as the lands in the New Westminster district were concerned, and those lands were held exclusively for sale. In view of the great cost of clearing and preparing for crop the heavily timbered tracts in the Fraser Valley, and the depreciation in the price of farming lands elsewhere, the provisions of the regulations in regard to homesteading were this year once more applied to the lands in the New Westminster district.

SEED GRAIN MORTGAGES OF 1876.

In the winter of 1875 it was found necessary to make advances of seed grain and supplies of food to the inhabitants of Manitoba in consequence of the destruction of crops by grasshoppers, which had occurred during the previous summer. In all cases where it was possible to do so, mortgages were taken on the farms of the recipients as security for such advances, but the work of collecting the moneys so advanced has been found to be attended with considerable difficulty, owing to the fact that there were many cases in which, either intentionally or unintentionally, the settlers assumed to encumber lands to which they had no title. For some years the work of making these collections has been entrusted to the Commissioner of Dominion Lands at Winnipeg, who has acted for this purpose as the agent of the Department of Agriculture. As it was found that the commissioner had facilities for dealing with the business which were not possessed by any other officer of the Government in the North-west, an Order in Council was passed on the 9th January last formally transferring the mortgages and the making of the collections to the Department of the Interior.

APPLICATIONS FOR FORESHORE LANDS.

By section 1 of 47 Victoria, Chapter 16, being an Act to further amend the Act respecting the Public Works of Canada (31 Victoria, chapter 12), it is provided, amongst other things, that any portion of the shore or bed of any public harbour vested in Her Majesty, as represented by the Government of Canada, not required for public purposes, may on the joint recommendation of the Ministers of Public Works and of Marine and Fisheries be leased or sold under the authority of the Governor in Council. The provision quoted subsequently became section 19 of chapter 39 of the Revised Statutes of Canada, respecting the expropriation of lands.

There does not appear to have been any action taken upon applications for foreshore lands between the years 1884 and 1886, a fact due no doubt to the uncertainty which existed at the time as to which department should take the initiative in dealing with cases of that nature. To remedy that state of affairs an Order in Council was passed on the 12th May, 1886, placing the management of foreshore lands under the control of the Minister of the Interior, subject, however, as required by the statute in that behalf, to the concurrence of the Ministers of Public Works and of Marine and Fisheries.

This arrangement, which required action by three departments in every case, has been found to be unsatisfactory, as the water lots applied for were in nearly every instance situated at places where there is no agent of the Department of the Interior from whom a

report upon the merits of the application could be obtained. Accordingly on the 13th July last an Order in Council was passed placing the business in relation to foreshore lands under the control of the Department of Marine and Fisheries, and providing that patents for such lands shall in future be issued by the Secretary of State of Canada under the authority of the Governor in Council upon the recommendation of the Minister of Marine and Fisheries.

I have the honour to be, sir,

Your obedient servant,

A. M. BURGESS,

Deputy Minister of the Interior.

PART I

DOMINION LANDS

No. 1.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE COMMISSIONER OF DOMINION LANDS,
WINNIPEG, MAN., 13th November, 1895.

The Honourable T. MAYNE DALY,
Minister of the Interior,
Ottawa, Ont.

SIR,—I have the honour to submit my report for the ten months ended the 31st ultimo.

It will be remembered that my last report was brought forward to the end of the calendar year 1894, and thus included two months, November and December, which otherwise would have been embraced in the present report. I have also to hand you the report of Mr. Pearce, Superintendent of Mines, and the reports of the several land and immigration agents and other officials under my control.

Appended to my report will be found the usual statements of the work performed, and immigration statistics, which may be classified as follows :—

(A.) The work of the Homestead Inspectors.
(B.) The work performed in my own office.
(C.) Transactions of the Immigration Hall, Winnipeg.
(D.) Labour returns, Winnipeg Bureau.
(E.) Record of immigrants accommodated at Government Buildings.
(F.) Statement as to immigrant settlers' effects, values, etc.
(G.) Particulars as to nationality of homsteaders.

Before reviewing the work performed I desire, briefly, to refer to certain matters and changes which have altered somewhat the *personnel* of my staff, all of which have had a tendency towards economy in the service.

The office of "assistant secretary," which was established some ten years ago, has been done away with, causing the loss—so far as my office is concerned—of the services of Mr. R. A. Ruttan, who for many years had rendered most valuable and able assistance. At the same time it is gratifying to know that his services have not been lost altogether, and that, having accepted charge of the agency at Edmonton, already an important one, and likely in the near future to become one of the most important, the department will still have the benefit of his efficient help.

It is my painful duty to refer to the death of Mr. Michael Donoghue, which took place early in the summer. Mr. Donoghue was appointed to this office shortly after it was first established, and continued in the employ of the department up to the date of his death, covering a period of over twelve years.

The services of another member of my staff, Mr. Alexander Norquay, have been transferred to the sub-district of Lake Dauphin. Neither of the vacancies thus caused has been re-filled.

With regard to changes outside of my own office I wish particularly to mention the superannuation of Mr. W. H. Stevenson, for many years in charge of the Qu'Appelle district, with headquarters at Regina. Mr. Stevenson came to this country about the same time as my predecessor, Mr. Walsh, and has been continuously in the employ of the department since then, rendering at all times most efficient service. His superannuation was due solely to failing health, he now being upwards of the age of seventy years. Mr. Stevenson has been succeeded by Mr. A. J. Fraser, who formerly filled the position of assistant agent, so that a saving has been effected in the administration of this office.

I would also refer to the superannuation of Mr. Thomas Anderson, who, for many years, efficiently served the department as Crown timber agent, and more recently as agent of Dominion lands at Edmonton.

The office which was established a few years ago at Beaver Lake, Alberta, has been discontinued, and the work will hereafter be performed at the offices in Edmonton and Wetaskiwin.

Statement "A" would indicate that the work of the homestead inspectors has been fully up to the average.

I will now take up statement "B," which furnishes particulars as to the work performed in my own office.

As my preceding report covered altogether a period of fourteen months, the figures cannot well be compared—at the same time it would appear that there has been a falling off in the volume of work done. This is doubtless due to several causes, not the least of which has been the general depression and consequent light immigration, while during the past month or two the ordinary routine work of the office has been considerably checked owing to the immense harvest this year, which has kept settlers too busy to attend to making their applications for patent and other land matters which usually form the subject of correspondence.

Last spring it was found that in certain districts of Assiniboia and Alberta, owing to recent failure of crop, it would be necessary to grant an advance of seed grain, and $55,000 was provided by Parliament to meet the expenditure in this connection.

The purchases made were :—

Wheat	51,118	bushels.
Oats	49,744	"
Barley	3,995	"
Potatoes	3,960	"
Total	108,817	"

and the average price paid for these varieties was 59, 34, 40 and 36 cents per bushel, respectively, the actual cost of the grain being $49,476.98.

The Canadian Pacific Railway Company, realizing the deserving character of the applicants for assistance, rendered very material aid by granting transportation of the grain at one-third of the usual rate, and the amount paid for freight on grain was $3,891.31.

The distribution of the grain was carried out with all possible regard to economy, and as far as practicable the duties of distribution were performed by officials of the department, under the advice and with the co-operation of the officers of the various agricultural societies.

In this connection I desire to record my appreciation of the valuable assistance rendered by the North-west Mounted Police, whose services were utilized in weighing and delivering grain at the various points ; this duty was performed with great efficiency and accuracy.

The total expenses connected with inspection, storage and handling of the grain at 23 different points—telegrams, printing, etc., amounted to only $1,268.42, being about 1¼ cents for each bushel delivered.

All the grain purchased was required to be of No. 1 quality, thoroughly cleaned and fit for seed.

Careful inspection was made of the grain purchased at Indian Head and Regina by Mr. Angus McKay, Superintendent of the Experimental Farm, Indian Head ; of that supplied at Brandon, by Mr. S. A. Bedford, who holds a similar position at that point ; and the grain obtained in Southern Manitoba was passed by Homestead Inspectors Aikman and W. H. Allison, upon samples approved by Mr. McKay.

The conditions on which the advances were made required that each settler should give a bond, with two satisfactory sureties, undertaking to pay by the 1st of April next the actual cost of the grain, and this security provides that it is a charge against any Dominion lands for which any of the three obligants now holds, or may hereafter obtain, an entry.

Not more than 100 bushels were allotted to any one settler.

Securities to the value of $53,446.13 are held, and grain was sold amounting to $2,306.09, thus more than accounting in full for the total expenditure of $54,636.71.

This issue of seed grain called for a very great deal of labour—much more than can adequately be shown in the statement—consisting of the preparation of the securities, the calculation of the amounts due, etc., etc.

The number of Half-breed scrip claims dealt with is 85, of which 49, representing an amount of $10,480, were recommended, and 36, to the value of $7,520, were not recommended.

You will remember that the time for receiving these claims, so far as the province of Manitoba is concerned, expired on the 1st May, 1886, and for the North-west Territories on the 1st May, 1894. A number of these claims, however, still remained outstanding last year, and the services of Mr. Roger Goulet were continued until the 1st of July last with a view to disposing of them. Mr. Goulet practically accomplished this object, although a few claims are yet in abeyance. Mr. Goulet's services terminated on the date mentioned. I do not think it is possible for me to speak too highly of Mr. Goulet's services during the long term of years he was in the employ of the department. He is a native of the country, and besides being well acquainted in a general way with the history of the country and the movements of the people, has an extraordinary personal acquaintance with very many of the families concerned in the issue of scrip, which has rendered his services of exceptional value in disposing of these claims. His high character is too well known to need anything at my hands, and the work he has done has not only been satisfactory to the department but to all concerned, as is evidenced by the almost entire absence of any complaint.

It may be necessary still at times to consult Mr. Goulet, and I am assured that he will be most willing to give the department the benefit of any information he is possessed of.

The returns from the several local agencies indicate that, while in some districts there has been a falling off in the number of homestead entries granted as compared with last year, in others there has been an increase. Most of the new arrivals this year are reported to be of a very desirable class; some have capital at their disposal, and all are of a character likely to prove good settlers. The most of the new-comers have gone into the Calgary and Edmonton country, although quite a number have gone to the Lake Dauphin distrtct. This district is admirably suited to mixed farming, and it will undoubtedly become one of the most fruitful portions of the province. Railway communication is badly needed.

The sales of land by the Canadian Pacific Railway Company and other corporations are considerably in excess of last year. So far as ascertained the sales have amounted to 104,000 acres, as against 65,679 in 1894.

Reference to the transactions of the immigration hall, labour returns, &c., will be made further on under the head of "Immigration."

The crop this year has been most abundant, the yield being far in excess of any previous year. The damage done by frost has not, as a general rule, been great, though in the western country between Calgary and Edmonton, the farmers have suffered considerably.

In the province of Manitoba the estimated yield is as follows:—

GRAIN CROP.

——	Acreage.	Yield per Acre Bushels.	Product in Bushels.
Wheat	1,140,276	27·86	31,775,038
Oats	482,658	46 73	22,555 733
Barley	53,839	36·69	5,645,036
Flax			1,281,354
Rye			81,082
Peas			28,229
Total			61,366,472

ROOTS AND POTATOES.

	Acreage.	Yield per Acre Bushels.	Product in Bushels.
Potatoes	16,716	243·05	4,042,562
Roots (Turnips and Mangels)	6,785	336·08	2,285,283
Total			6,327,845

I have no returns from the territories.

The general outlook appears to be of a most satisfactory kind, and business people are looking forward to "good times" next year.

The export of horses and cattle, as well as of dairy and other products, is considerably in excess of last year. The following figures may be given as approximately correct :—

Horses	350
Cattle	32,000
Hogs	7,500
Sheep	7,000
Wool	1,000,000 lbs.

It will be noticed that there is a large increase in the export of cattle, and the most encouraging reports are received from almost every part of the country as to the condition of the stock. Sheep raising would also appear to be giving good results.

The export of dairy products, though still in its infancy, is rapidly growing. It is estimated that, so far this year, about one million pounds of butter and cheese have been shipped. The facilities for transportation are constantly improving, and this branch of industry will, without doubt, very soon assume large proportions.

I would direct attention to the interesting remarks by Mr. Pearce in his report under the head of "Dairying, Cattle and Hog raising."

The raising of bees has, I understand, proved quite successful in some localities, and it is altogether probable that this will prove a valuable source of revenue to the farmer.

TIMBER.

As indicated in my last report, the question of the preservation of timber is receiving careful consideration, and arrangements are now being perfected by which certain tracts will be set apart as permanent reserves for this purpose.

PRAIRIE FIRES.

I regret to state that very considerable loss has been sustained by settlers this year through the prevalence of prairie fires, resulting in the destruction of large quantities of hay and grain in stack. This subject was referred to in my last report under the heading of "Forest Fires," and I can only repeat that some effective means should be taken, both in Manitoba and the Territories, with a view to ascertaining the true origin of these fires, and of enforcing proper penalties against offenders. The subject is one requiring careful consideration and prompt action.

BRITISH COLUMBIA.

The reports from British Columbia go to show that there has been a falling off in the number of entries granted. This is partly accounted for, so far as the Kamloops district is concerned, by the fact that some of the more recent surveys have not yet been confirmed, and that most of the available agricultural land has been taken up. The price of lands in the New Westminster district having this year been reduced to $1 per acre, subject to the performance of the ordinary homestead conditions, all the remaining vacant lands in the Railway Belt may now be acquired at this price. The season is reported to have been an excellent one, both as regards crops and stock.

Department of the Interior.

IMMIGRATION.

According to the returns of the Winnipeg Immigration Hall, as well as by the lists of the European settlers booked to this country, there has been a falling off in immigration during the present season. It is not easy to account for this state of affairs except that the conditions which produced a similar result last year are still affecting us. The commercial depression and the low price of wheat combined with only moderate crops, no doubt militated against immigration to Canada, but it may be confidently anticipated that the present large harvest, perhaps the greatest ever reaped in this country, will not be without its effect next year. In spite of the low price that still prevails, farmers, by the large yield of their fields, are in a much improved position financially, and when this is known in Europe no doubt many will come out to benefit by the prosperity which will follow. Already there is a demand for land springing up, and labour will be required to work the increased acreage which will be brought under cultivation.

COLONIES.

In Southern Manitoba the Mennonite, Crofter and Icelandic colonies are in a far better position than in former years; the crops have been excellent and merchants report that they are getting in a good deal of money, whilst business is generally improved.

For years past the Icelanders in the Tiger Hills of Manitoba have been conspicuous for the attention that they have paid to the raising of sheep, though only as yet in small numbers. This industry has been fostered by their efforts, and the wool manufactured into articles of clothing, for which there is a fair local demand. The Crofters and Belgian settlers are inclined to do the same, and will no doubt materially improve their financial standing in the course of a few years.

The Icelandic colony at Gimli has been especially fortunate this year.

The people in this colony were able to adopt a mode of living such as that to which they had previously been accustomed, and consequently did not feel the change of situation which so often discourages new comers. With excellent fishing on the lake and an ample range for their cattle, they have been independent from the start, though, doubtless, the absence of grain raising has to some extent retarded their progress. Following the example, however, of their neighbours to the south, many of them obtained seed wheat and oats, and this season have harvested excellent crops—wheat yielding as high as 40 bushels an acre. There is little doubt that with a convenient market, which unfortunately they do not at present possess, the Gimli settlement would contribute its share to the output of grain from this province.

Live stock, to which these thrifty and industrious people have given much attention, has done well with them, and there are but few who have not a herd of cattle for which they find a ready and profitable market with the dealers who traverse the country.

The establishment of a saw mill and the erection of a wharf have proved of great public benefit, whilst churches and schools show that in other respects the people are steadily advancing.

In the Argyle settlement, the progress has been marked, and the excellent harvest this year will no doubt conduce to the general prosperity. Very little damage has resulted from summer frosts, and the wheat has graded nearly all No. 1 hard.

The Shoal Lake colony on the east side of lake Manitoba promises well; it contains about fifty families who devote themselves chiefly to stock raising, to which the country is particularly well adapted.

In the Red Deer settlement the Icelanders similarly turn their attention to cattle, not, however, neglecting to raise a sufficiency of grain for their own use.

The Scandinavian settlement in Manitoba and the eastern parts of the territories have been fairly prosperous, but their crops in Alberta have been poor, whilst some loss has resulted from prairie fires.

The Bella Coula settlement in British Columbia is progressing steadily, having received an addition of ninety souls during the current year; excellent houses have been erected, and a certain amount of land cleared of heavy bush, besides which a saw-mill and cannery have been established, so that the people may be considered as sufficiently well to do.

The Hungarian colony in townships 23 and 24, ranges 5 and 6, W. 2 M., is making excellent progress, and has been increased by a number who lately arrived from the United States and Hungary; many, especially those from Europe, being well provided with funds.

On the whole the German colonies have done well this year; new ones have been started in Northern Alberta, and the older settlements have gathered strength by addition to their populations. This also is the case in the colonies north of Beauséjour and Gladstone in the province of Manitoba.

There are in all fifty-two distinct German colonies, two of which are in Manitoba, the rest being in the territories. They contain about 2,300 families, numbering 10,000 souls; have 45,000 acres under cultivation; possess some 3,500 horses; 20,000 head of stock, and 3,000 sheep. These figures, of course, do not include the Mennonite reserve in Southern Manitoba, or the Germans living in the cities and scattered singly throughout the country.

The Mennonite settlement at Rosthern has been increased this year by about 250 souls, some of the people moving in from the overcrowded reserves in Manitoba, and others from Russia and the state of Minnesota. They have afforded abundant proof of their worth as settlers, and it is unfortunate that the crops have been somewhat poor in this neighbourhood; however, they have sufficient stock to enable them to overcome what might otherwise prove a serious obstacle to their advancement.

The French colonies are reported to be progressing satisfactorily, and the many inquiries that are being received at the Immigration Offices indicate an interest that will result favourably in the future.

The number of French and Belgians who have arrived this season is less than appears in my last report, but it may be said that they are of a better class and possessed of some capital, sufficient in the majority of cases to give them a fair start. As a rule they do not delay in selecting homesteads, exhibiting an eagerness to be working each for himself. Similarly, those whose means are limited obtain employment and soon earn sufficient to commence with, after which their progress, if slow, is generally sure.

ICELANDIC IMMIGRATION.

Immigration this year has been small. As a rule these people require to be assisted, being otherwise unable to undertake the expense of the journey. Their friends, who are either farming in a small way or working out to get together sufficient money to make a start on their own account, have not been unaffected by the past year's depression, and have advised them to stay at home or wait for better times. Another and stronger reason is that there has been a great improvement in Iceland, the fishing and stock-raising industries having proved most remunerative during the past two years; in fact, the people have experienced a degree of prosperity hitherto unknown in the present century. Under the circumstances it is not to be wondered at that the poorer or immigrant class should prefer to remain in their native land.

SCANDINAVIAN IMMIGRATION.

The records of the Winnipeg immigration hall show that a smaller number of Scandinavian immigrants were accommodated this year than last, but a great many have reached the Territories by the "Soo" Line via North Portal, of whom we have no record, and there is every reason, therefore, to believe that, had they as in previous years, registered in Winnipeg, the result would have been to show a satisfactory increase.

During the last year several Scandinavian farmers arrived here bringing with them a fair amount of capital. This may be accepted as a hopeful sign, as heretofore we have

only received the labouring class, destitute of means, for whom it has been necessary to find employment.

Work was, unfortunately, scarce in the spring, and some hardship was experienced in consequence, but with the approach of harvest a brisk demand for labour sprang up and with good wages the active able-bodied men have done well. It is probable, moreover, that threshing operations will be protracted well into the winter owing to the very large crop.

GERMAN IMMIGRATION.

The number of Germans registered at the Winnipeg immigration building is less than last year, the decrease being in respect of those starting from Austrian and Russian ports; on the other hand the number arriving from Germany proper has increased about 125 per cent.

The majority of those arriving were of a good class, and it is known that certain of them who availed themselves of the assistance of the German interpreter brought in more than $40,000 in drafts payable at local banks.

The falling off may be attributed to the poor crop last year, and the discouraging accounts sent to their friends by those who had already come out here, and who suffered by the low price, and found it hard to obtain employment.

As in the case of the Scandinavians a good many Germans have come in by the "Soo" line, and, taking this into account, no doubt the decrease is more apparent than real.

No difficulty was experienced in obtaining employment amongst the Mennonites for new-comers able and willing to do farm work, but there was little demand for men who were not familiar with these duties. However, during harvest there has been plenty of work.

LABOUR.

The large harvest this year has necessitated the importation of labourers from Ontario, some six thousand men being brought in by the Canadian Pacific Railway Company. It is known that many of these will remain here, and in any case the sight of the wheat fields and the accounts of their vast yield which will be carried back to the older province cannot but have a good effect next year. The excursionists who visited us speak highly of the country, and a large proportion have announced their intention of locating here permanently.

FRUIT GROWING.

Attention is being given to the production and marketing of fruit in British Columbia, where the natural advantages and excellent results that have already attended efforts in this direction indicate that this industry may be followed with every prospect of success.

In Manitoba too the culture of small fruits is rapidly coming to the front. For a long time it was held that in this climate they could not be produced successfully, but the displays at the recent agricultural shows and exhibitions have entirely dissipated this idea, and market gardeners and small farmers are raising excellent crops which find a ready sale in the neighbouring towns.

VEGETABLES.

Any one who has visited the fall fairs in Manitoba or the North-west Territories has realized how singularly well adapted the soil of this country is to the raising of vegetables which every farmer can have for very little trouble. Recently market gardens have been started in the vicinity of Winnipeg and other large towns, and an excellent and growing trade is carried on which may possibly develop into something of importance in the near future.

TOBACCO CULTURE.

The cultivation of tobacco has been long carried on with success by French settlers in Manitoba and more recently in British Columbia. With a view to ascertaining whether this country was adapted to the production of a fine leaf, such as would be of commercial value, I caused some seed which had been procured from Havana to be distributed at various points in Manitoba, Assiniboia and British Columbia, with full directions as to the proper mode of cultivation. Unfortunately, this was done rather late in the season, which, combined with the backward spring, militated somewhat against the success of the experiment.

It is too soon at the time of writing to speak with confidence of the results, but, from the reports received, there is good reason to believe that if settlers could be induced to give the matter sufficient attention, an excellent quality of leaf might be grown for the eastern market.

I have the honour to be, sir,

Your obedient servant,

H. H. SMITH.

Commissioner.

A

STATEMENT showing the work of the Homestead Inspectors for the ten months ended the 31st of October, 1895.

Name of Inspector.	Number of Inspections.	Number of Applications for Patent received.	Miles travelled.
Thomas H. Aikman	196	152	3,190
John Allison	142	67	5,106
*W. H. Allison	282	182	2,786
John J. Arsenault	244	110	3,957
John Coleman	283	8	4,198
R. S. Cook	No returns	No returns	No returns
George J. Cox	208	84	3,152
R. S. Park	252	129	4,525
†John Rogers	284	105	3,247
J. R. Thompson	218	59	3,510
Totals	2,109	896	33,671

*On freight rate commission.

†On seed grain business.

STATEMENT of Work in the Office of the Commissioner of Dominion Lands for the ten months ended the 31st October, 1895.

Departmental Year.	Letters received.	Letters sent.	Cancellations by Orders of the Land Board			Applications for Patent, approved and Pending.	Half-Breed* Scrip Claims.			Number of Homestead Inspectors' Reports.	Number of Authorities issued for entries through Agent.	Receipts.					Cheques Issued.
			Homesteads.	Preemptions.	Refused and pending.		Applications received.	Recommended.	Disallowed.			Relief Mortgages.	Seed Grain Advances.	School Lands.	Patent Fees.	Maps, &c	
												$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
1895 ..... (10 mos)	24,157	26,471	81	62	209	1,873	85	49	36	2,109	1,285	910 64	2,363 92	6,708 33	2,895 00	55 25	471

*Amount involved $18,000—

Recommended	$10,480 00
Disallowed	7,520 00
	$18,000 00

C

RETURNS of Arrivals at the Dominion Immigration Building,

—	From Eastern Canada.			Via Ocean Travel.					Via United States.					Total Arrivals.			
	Adults and Children		Total.	Adults.		Children		Total.	Adults.		Children		Total.		English.	Irish.	Scotch.
	M.	F.		M.	F.	M.	F.		M.	F.	M.	F.					
January	2	2	4	23	14	8	14	59	10	1	...	3	14	77	5	....	3
February	4	....	4	9	3	2	4	18	12	2	1	2	17	39	5	1	4
March	10	5	15	86	9	12	12	129	51	23	38	38	150	294	43	5	32
April	44	38	82	253	54	23	23	353	133	67	88	81	369	804	198	21	25
May	5	8	13	310	118	130	102	660	35	24	16	20	95	768	125	22	11
June	4	3	7	131	74	31	34	270	23	13	11	16	63	340	57	2	17
July	6	4	10	171	74	55	45	345	15	14	22	20	71	426	102	6	20
August	40	8	48	88	44	19	37	188	13	7	8	8	36	272	27	....	18
September	17	10	27	50	26	18	20	114	13	8	9	8	38	149	53	....	3
October	8	2	10	27	13	4	9	53	42	36	37	32	147	210	4	2	5
	140	80	220	1148	439	302	300	2189	347	195	230	228	1000	3409	619	59	138

Winnipeg, for the ten months ending the 31st of October, 1895.

Nationalities.									Trades.								Destinations.				
Germans.	Scandinavians	French.	Belgians.	United States.	Canadians.	Icelanders.	Others.	Total.	Farmers.	Farm Labourers.	General Labourers.	Mechanics.	Clerks.	Female Servants.	Not classified.	Total.	Ontario.	Manitoba.	N. W. T.	British Columbia.	Total.
41	11	1	5	....	4	....	7	77	25	2	4	....	3	4	39	77	....	45	27	5	77
9	5	4	1	....	10	....	....	39	10	10	2	1	1	1	14	39	....	31	6	2	39
64	18	14	4	5	73	7	29	294	77	56	8	....	4	4	145	294	15	162	117	....	294
125	221	96	10	17	70	14	7	804	205	182	7	2	5	20	383	804	. .	361	378	65	804
283	86	127	19	11	31	7	46	768	149	155	15	3	8	35	403	768	....	367	395	6	768
86	62	60	15	12	7	6	16	340	97	45	6	....	10	16	166	340	....	186	135	19	340
139	82	14	10	10	22	4	17	426	67	102	14	....	6	22	215	426	....	286	122	18	426
53	48	61	6	....	58	1	....	272	28	97	8	....	6	13	120	272	2	179	84	7	272
36	40	9	4	1	28	...	5	179	49	23	4	....	3	13	87	179	....	117	59	3	179
33	96	15	1	20	32	....	2	210	48	17	7	....	2	7	129	210	3	59	109	41	210
869	669	401	75	76	335	39	129	3409	755	689	75	6	48	135	1701	3409	20	1791	1432	166	3409

D

LABOUR Demand and Supply for the ten months ending October 31, 1895.

	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		Total.	
	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.	Demand.	Supply.
Battleford		3																				3
Brandon				1	7	6	4	10	3	10	10	2	1	2	3	3					28	34
Calgary																						
Edmonton																						
Estevan																						
Lake Dauphin																						
Lethbridge																						
Minnedosa											1										1	
Prince Albert								1														1
Red Deer						1		2					1					1				4
Regina		2		3													2				3	5
Wetaskiwin																						
Winnipeg	19	10	37	17	66	27	143	89	135	74	147	92	187	90	194	149	104	27	42	14	1,074	589
Yorkton								1														1
Kamloops		1						2										1	1	2	1	6
New Westminster		2		2		5		6		3		1		1		6		9		10		45
Total	19	18	37	23	73	39	147	111	138	87	158	95	189	93	197	158	106	38	43	26	1,107	688

RECORD of *Immigrants accommodated at Government Immigration Buildings for the ten months ending October 31, 1895.*

——	Januarv.	February.	March.	April.	May.	June.	July.	August.	September.	October.	Total.
Brandon			4	18	18	10	5	25		3	83
Calgary	12	45	149	287	168	99	157	116	90	178	1,301
Edmonton	37	4	124	54	137	50	100	38	50	55	649
Minnedosa											
Prince Albert			1	16	19	1	2	29			68
Red Deer				25	12	13	11		1		62
Regina						3	3	10	5		21
Wetaskiwin				40	46	37	15				138
Winnipeg	77	39	249	804	768	340	426	272	179	210	3,409
Duck Lake											
Total	126	88	527	1,244	1,168	553	719	490	325	446	5,731

F

RETURN of Settlers' Effects recorded at Customs Ports of Entry in Manitoba and the North-west Territories for the ten months ended the 31st of October, 1895.

PORT OF ENTRY.	HORSES.		CATTLE.		SHEEP.		PIGS.		MACHINERY.	OTHER EF'ECTS	TOTAL VALUE.
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	Value.	Value.	
		$ cts.		$ cts.		$ cts.		$ cts.	$ cts.	$ cts.	$ cts.
Lethbridge										1,305 00	1,305 00
St. Mary's	638	11,928 00	238	2,722 00			7	21 00	5,539 00	4,695 00	24,905 00
Coutts	70	1,860 00	24	270					369 00	2,520 00	5,019 00
Maple Creek	17	327 00							100 00	152 00	579 00
Fort Macleod	58	885 00								950 00	1,835 00
Gretna	*16	870 00	133	2,124 00	283	695 00	68	328 00	7,430 00	17,135 00	48,292 00
	351	19,710 00									
North Portal	366	13,949 00	123	1,951 00	139	226 00	77	390 00	3,024 00	9,467 00	29,007 00
Calgary	48	2,425 00			26	96 00			1,694 00	13,673 00	17,888 00
Killarney	127	6,666 00	48	616 00	1	2 00			1,597 00	1,457 00	10,338 00
Crystal City	22	940 00	7	80					543 00	353 00	1,916 00
Deloraine	62	2,260 00							616 00	513 00	3,389 00
Brandon										3,587 00	3,587 00
Emerson	28	1,205 00	10	185 00	11	40 00	4	20 00	1,628 00	1,035 00	4,113 00
Carberry										316 00	316 00
Portage la Prairie	7	350 00							218 00	5,851 00	6,419 00
Virden										200 00	200 00
Regina									60 00	2 723 00	2,785 00
Winnipeg										21,169 00	21,169 00
											183,060 00

*Mules.

REPORT OF THE SUPERINTENDENT OF MINES

No. 2.

SUPERINTENDENT OF MINES,
CALGARY, 31st October, 1895.

H. H. SMITH, Esq.,
Commissioner of Dominion Lands,
Winnipeg, Manitoba.

SIR,—I herewith have the honour to report through you for the information of the Minister of the Interior on the work of my office for the departmental year ending this date.

From the 19th November to the 20th May last the greater portion of my time was occupied in connection with the Freight and Passenger Rates Commission, and what time was not so occupied was devoted to attending to matters which had accumulated in my office during my absence, excepting from the 25th March to the 5th April, when I was engaged relieving you at Winnipeg.

27th May to 31st May.—Visited Edmonton investigating certain charges preferred against the officials in connection with the work of the agency at that point.

3rd to 4th June.—Visited the Wetaskiwin agency on a similar mission.

10th to 13th June.—Visited Winnipeg to discuss certain matters with yourself.

17th to 27th July.—Visited Southern Alberta in connection with grazing matters and certain questions arising out of squatting on stock-watering reservations and "Mountain View" dispute on section 19, 2, 27 west of 4th meridian.

25th July to 1st August.—Visited Regina to meet you, and also the Minister of the Interior.

7th to 10th August.—Inspected the Quorn Ranch leasehold and lands in the vicinity, selecting stock-watering and shelter reservations.

24th August.—Visited Banff to meet the Minister of the Interior.

Left Calgary on the morning of the 7th September to attend the "International Irrigation Convention" at Albuquerque, New Mexico, and to visit the irrigation districts in Northern Colorado. Reached Calgary again on the morning of the 27th ultimo.

Reports on all the foregoing matters were submitted immediately after the various visits.

COAL MINING.

The output of the Canmore mines was perhaps twice as large as any preceding year, and through the efforts of the management the use of the coal has been very much extended so that it is now universally used between Medicine Hat on the east and North Bend on the west for steam purposes on the locomotives of the Canadian Pacific Railway Company.

The output of the Anthracite mine was of a splendid quality and a large quantity of this coal was consumed as far east as Winnipeg; but the proprietor of the mine alleges that the Pennsylvania interests have combined against him and are putting in coal at Winnipeg at a lower price than he can profitably do so, in order to close him out. This, of course, is a losing business to them; but with a capital sum of $100,000,000, the loss sustained at a point of the size of Winnipeg does not matter much. Their object is to kill the industry in order that it may not at some future date become a dangerous competitor to them at more important points such as Montana, Wyoming, the Pacific States, etc. If standard gauge connection is ever put in between Lethbridge and the main lines of those States elsewhere so as to connect with Anthracite and thus place the same in direct touch with the westerly part of the United States, and the mining interest is backed by a strong enough company, one can easily foresee that the

American anthracite coal would speedily become a thing of the past in that part of the States in order to make room for our superior grade of hard coal.

The output at the Lethbridge colliery was quite up to last year's figures.

Considerable quantities of coal were brought into Calgary last winter from the Edmonton mines, and apparently the quality was superior to that shipped last year. It is now sold here at a lower rate per ton than any other coal.

The Paterson mine at Fish Creek is being worked now by an experienced miner and the coal is sold at the mine for the extremely low price of $1.65 per ton. This, with the Sheep creek and Knee hill mines, supplies the largest part of the ranching population contiguous to Calgary with winter fuel. Calgary also received probably thirty per cent of its consumption from these sources. Wood is now getting scarce throughout the more thickly populated ranching districts, and these mines owing to their central locations solve what might have been a serious problem.

Southern Alberta's fuel supply is obtained from Lethbridge, coal seams on the St. Mary's in the neighbourhood of Pot Hole creek, seams in the Milk River ridge, others in the Waterton river valley on and near Pincher creek, and on the South, Middle and North Forks of the Old Man's river. A reference to the map will show that no portion of that district is at any considerable distance from one or other point of supply.

COKE.

This promises soon to become one of the most important industries in Alberta. As new quartz mines are opened up in the mountains and smelters established, the demand for this article becomes more and more urgent. The enterprising management of the Canmore coal mines are now arranging for the construction of coke furnaces by which they hope to supply the smelters now being erected in connection with the mining industries of the Kootenay country. Excellent coking coal is found in several different localities in Alberta, and the day is not far distant when the same will be utilized to a very large extent.

PLACER MINING.

Arrangements have been made during the year to work part of the Upper Saskatchewan river with hydraulic machinery, and I am informed that the same is about ready for use. The exploration parties which prospected the Upper South Saskatchewan and the Bow rivers last year did not renew their efforts this year, although it was reported they met with considerable success last season. A number of settlers in the vicinity of Edmonton still devote their spare time to gold washing. It was reported during the early part of the summer that rich placer digging had been discovered on the head waters of the Athabasca river and there was quite a rush; but recent reports would indicate that no better returns were found than those on the Upper Saskatchewan. During the summer there were about 1,000 persons engaged in placer digging on the North Saskatchewan and Athabasca rivers, of which probably forty per cent. were within a radius of twenty miles from Edmonton. There were also two or three dredges of rude construction in operation.

PETROLEUM.

The only developments that have taken place in this branch of mining were those performed by the Dominion Government at Athabaska Landing, under the direction of Dr. Dawson, full report of which will undoubtedly be furnished by the Geological Branch.

MINING GENERALLY.

The phenomenal discoveries and developments which have taken place in the West Kootenay country must have a very beneficial effect in the near future on mining in

dustries and operations in Alberta and British Columbia. The more attention that is drawn to that point and the greater the rush of prospectors, the more territory will be prospected. This has to some extent already been illustrated, as during the past summer quite a number of prospectors have been examining the country tributary to the Bow river in the mountains with a view to mining operations there ; indeed, some few gold quartz claims have been recorded. This healthy movement is in striking contrast to the apathy of several years past, and, if not to this district particularly, great advantage will no doubt accrue to the country generally from the interests which may thus be established.

IRRIGATION.

Mr. J. S. Dennis, Chief Inspector of Surveys, and the officer appointed by the Minister to take charge of the topographical and irrigation surveys, will deal fully with this question in his report and with what has been done in the way of construction during the past year. It will be observed that the majority of the irrigationists are evidently preparing to loyally fulfil the requirements of the "North-west Irrigation Act." Some few, of course, will be delinquent, and it is questionable whether the penalty imposed under the Act should not be enforced. All who have given the subject any considerable thought will agree that it is of vital importance to adhere strictly to the regulations. Excepting disputes arising out of mining, more bad feeling has been engendered through irrigation disputes than probably through any other subject, and the only remedy would appear to be the most rigid enforcement of the regulations prescribed.

The past season opened out with extremely dry and cold weather, which state of things continued until late in June ; it then turned showery, but still remained chilly and cloudy, with an abundance of moisture up until the 1st September. The grain got a very late start, and owing to the absence of ripening weather there was a great growth of straw and it did not thoroughly mature. Considerable damage was also done by frost in various districts of the North-west, notably a large portion of Southern Alberta as well as a considerable portion of Northern Alberta, also Assiniboia and Saskatchewan ; the two latter, however, to much more limited extent. In consequence of the unfavourable weather experienced during the season, the effects of irrigation are not nearly so noticeable as they would have been in any one of the ten preceding seasons ; but in spite of that fact everyone admits the beneficial effects of artificial watering, and instead of retrenching are anxious to extend their irrigation operations to the utmost capacity their means will allow, and are more than ever enthusiastic believers in irrigation. This subject touches nearly another of equal importance, namely :

DAIRYING AND CATTLE AND HOG RAISING.

It is announced on unquestionable authority that a refrigerator service is now available for dairy products, etc., between this point and Liverpool and at a cost which will not exceed 2 c. per pound. In other words, a rate which does not exceed that charged on dairy products from points in Ontario to the same destination by more than one and four-tenths of a cent per pound. Assuming that the average value of first class butter at Ontario points is 18c. per pound, which probably is not a high estimate, its value here should represent 92% of that amount. Or, the butter making industry of Alberta is handicapped only to the extent of 8%, representing transportation, as compared with its competitor Ontario, while the latter, as compared with Alberta, is probably handicapped to the extent of 25% in the matter of fodder for the stock. Probably the Ontario producer has a slight advantage in the lower price of labour in that province employed in dairying ; this, however, is not a very considerable factor. On the whole, the prospects for dairying in the North-west Territories, particularly in that portion known as the foot-hill country in Alberta and in the Cypress hills and Wood mountains of Western Assiniboia, are exceedingly favourable. There the quality of the grasses, water, etc., and the properties of the climate in maturing butter, are all of the

best. With skill in manufacture, care of cows, and fodder equal to that of Ontario, one would not be reckless who would assert that the difference in quality would secure a price, certainly equal, probably greater than the difference in the cost of transportation to the English markets. The absence of flies to any great extent, which worry the stock and cause a marked deterioration in the quantity and quality of milk, is also a valuable consideration in connection with this industry. I have for years, ever since 1887, directed attention to the question of dairying in the North-west, in my annual reports. It is difficult to conceive of a safer and more profitable venture than that of dairying in connection with hog raising and poultry farming. For families especially who have the necessary labour within their own circles and a limited capital to invest, this affords excellent opportunities, and it is almost incredible that more of such enterprises are not now in operation in a district where such could be prosecuted under the most favourable auspices. The solution of the question is undoubtedly to be found in the fact that those who should be, financially and otherwise, in a position to lead the van in this respect, have, with very considerable profit, devoted all their time and capital to the raising of stock for export, and have to some extent been deterred from going into the enterprise under discussion on account of the confinement to home it necessarily entails, and the extra labour it requires. As before stated, pork raising would form a valuable adjunct to dairying for this reason, that between the time when the pig is weaned and the time when it is desired to fatten it for the market, an interval of four or five months occurs in which the most profitable and satisfactory diet is undoubtedly largely skimmed milk, which, of course, is available in abundance in every dairy, supplemented by vegetable refuse, etc., which every household should have in plenty. A pork industry has recently been established at this point and already upwards of $1,000.00 per week is paid out for hogs imported from Manitoba, and even from far eastern points, and it can no doubt easily be demonstrated that if the farmer of Alberta would convert his coarse grains into pork instead of disposing of them at present market prices, he would receive probably from 30 to 60% more profit on his year's labour than he does now, and the same percentage of higher profit on his wheat, even if the latter were considerably inferior, than the Manitoba farmer gets for his No. 1 hard. The allegation that dairying will necessarily reduce the output of beef is not sound either. If the milk when robbed of its butter fat is found to be inadequate for the nourishment of the calf, there is nothing to prevent the farmer adding a quantity of linseed equal to the requirements of the occasion at one tenth the price he receives for the butter fat in his milk. At present it is quite a common practice to allow one cow to raise two calves, and it is reasonable to suppose that if first class dairy stock only were kept, fifty per cent of the calves would be provided for in this manner and thus enjoy all the advantages of being raised on the range, while their dams could be utilized for dairying purposes. Combining this industry with hog and poultry raising and the production of eggs, and the shipping of the produce with cold storage appliances necessary to successfully carry out the same, an enterprise would be established which could hardly be excelled.

The most serious drawback to the pork-producing industry would appear to be the lack of good breeding animals, and it is a question worthy of the most serious consideration whether steps by co-operation could not now be taken to expedite the solution of this difficulty. The subject of dairying necessarily brings one back to that of irrigation in connection therewith, and it is admitted that the latter forms a most invaluable adjunct thereto, at least in countries where irrigation can be profitably prosecuted. Irrigation enables the dairyman to reside within easy distance of towns or communities equalling the size and importance of a considerable village, and confers many obvious social, religious and educational advantages not attainable under ordinary settlement. He can distribute the water on the cultivated portions of his holding and on a limited area raise sufficient winter fodder for his stock, while his pasture which, by the way, also can have its value multiplied at least ten fold by irrigation, will thus support a number of cows increased at the same rate. The water being distributed over the tract reduces the distance the cows have to travel for the same. In fact, to show to what extent irrigation has met conditions which were not anticipated, it might be mentioned that Prof. Carpenter, who has charge of the Agricultural College at Fort Collins, Col.,

has stated that during the last winter, within a radius of six miles from that point, upwards of 200,000 bushels of wheat was fed to sheep, in addition to the clover and other hay, all of which was raised by means of irrigation. The sheep to which this was fed were all brought in from New Mexico in the fall, and fattened for the spring and winter markets in the east, to which points the bulk of them were shipped in April and May last. To further emphasize this, attention might be directed to the fact that Colorado does not produce as much wheat as is consumed by its population, consequently the price there was about 40 per cent higher last winter than in Manitoba, in other words 55c. per bushel was paid for the wheat so fed. It is also a fact that the enterprise proved highly remunerative both to the owners of the sheep and those who supplied the grain and hay. In 1870 when irrigation was first undertaken at this point, the man who had asserted that such a condition of affairs could be brought about by irrigation would quickly have been voted mad on that subject.

CATTLE AND SHEEP.

The past winter, although perhaps averaging a little lower in temperature, was probably as regards bad storms the most favourable one we have had within the memory of the oldest settler, and the output for the market of this year has also been the largest in the history of the country, exceeding that of any other year by at least 40 per cent. While such is the case, it would be erroneous to think that the ranges are in a state of depletion of stock, as, out of the total number shipped out of the country, probably no less than 20 per cent were brought in here as stockers from Manitoba and other eastern points last year and the year before. This year a number of stockmen have taken advantage of the low rates offered by the Canadian Pacific Railway Company (on account of the shortage of fodder in Ontario) on stock from that province to Alberta, and several train loads have been brought in, and will be shipped to Europe as soon as matured. If a supply of one and two year old stockers were readily obtainable, it would be advisable that our ranching districts should be devoted wholly to the maturing of stock, and that those ranchers who conduct operations on an extensive scale should largely go out of breeding. Nothing would be more conducive to such a state of affairs than the removal of the quarantine regulations; but on the other hand, there would be this danger to be apprehended, that our ranges might soon be overflowed with stock, the result of which being that they would be eaten out, and the profits accruing from such enterprises might also ultimately find their way to the pockets of large cattlemen across "the line." I have discussed this matter in previous reports, and am of opinion that probably regulations could be devised which would to a large extent, and possibly fully, counteract the injury anticipated.

In my report of two years ago I drew attention to the fact that great injury was being done to the stock interest of Northern Alberta by the importation into that district of inferior animals by immigrants from the Western States. Such have not been met to a corresponding extent by the importation of good stock by the farmers in the country, who rather seem to have been extremely careless as to their breeding of late years. The result is that while last year Southern Alberta and many other parts of the territories exported a very large number of matured cattle to Great Britain, hardly any, if any at all, were shipped from Northern Alberta; what cattle were sold had to be used for local consumption. The local papers have, however, within the past two or three weeks, been drawing attention to this point, and it is to be hoped that public sentiment will be sufficiently educated to remedy that state of affairs—one to be very much deplored indeed.

HORSES.

The importation of inferior animals by so-called settlers from the States has not been as large lately as it was during the spring. The traffic is very injurious to the horse industry of Alberta, for various reasons. In the first place, it lowers the standard

of breeding and, secondly, it has a tendency to diminish the price of better animals, as these inferior ones are disposed of at extremely low prices and the settler of limited means is often tempted to purchase them. It is noticeable that the owners of inferior bands of horses throughout Southern Alberta have gradually ceased breeding the same or are endeavouring to improve them by breeding them to superior stallions in cases where they have the means to do so. Perhaps never in the history of Alberta has the ranchman been more alive to the fact that in order to make horse breeding pay only the very best of breeding mares, capable of raising stock fit for export, should be kept. Some shipments of saddle and coach horses have been made to continental ports during the year and with very satisfactory results; the prices averaged the rancher, it is stated, somewhere about $70 per head; a most gratifying return considering the low working expenses in connection with this industry. It is said these shipments will be repeated next season. In conclusion I would again direct attention to my report of one year ago regarding action to be taken to prevent the "eating out" of the public domain by worthless bands of horses.

SQUATTERS ON SPRINGS.

This subject has had considerable attention devoted to it in former reports and I am happy to say that the evil is not increasing. The prompt ejection of a few parties which it is hoped will be effected soon will no doubt have the effect of stopping the practice of squatting on these reservations, the general sentiment of the country being strongly in favour of protecting them. It is to be expected that the individual squatter will always be able to command a certain amount of sympathy in his own immediate neighbourhood or from those who are desirous of undertaking a similar experiment, as the temptation to acquire these favoured points is very strong indeed; but for the general good of the communities it must be prevented.

All of which is repectfully submitted.

I have the honour to be, sir,

Your obedient servant,

WM. PEARCE,

Superintendent of Mines.

No. 3.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INSPECTOR OF AGENCIES,
OTTAWA, 27th November, 1895.

H. H. SMITH, Esq.,
Commissioner of Dominion Lands,
Winnipeg, Man.

SIR,—I have the honour to submit, for the information of the Minister of the Interior, a report on the work of my office for the period of ten months ended on the 31st October, 1895.

In the month of March I made inspections of the Dominion lands agencies at Prince Albert, Regina and Red Deer, and of the Crown timber office at Prince Albert.

In April the Dominion lands offices at Calgary, Edmonton and Wetaskiwin, and the Crown timber offices at Calgary and Edmonton, were inspected.

In July I inspected the immigration office, Montreal, and the Dominion lands office at Estevan.

In August I attended a meeting of the Dominion Lands Board at Regina and made inspection of the Dominion lands offices at Regina, Brandon, Winnipeg, Minnedosa, Yorkton and Lake Dauphin, and the Crown timber office at Winnipeg.

In September the Dominion lands offices at Lethbridge, Kamloops and New Westminster, the office of the superintendent of the Rocky Mountains Park and that of the Crown timber agent at New Westminster, were inspected.

In October I visited Halifax in connection with the replacing of the immigration buildings which were destroyed by fire last winter, and inspected the immigration offices there and at Quebec and Montreal.

In making these inspections I travelled by rail 16,000 miles and by team 260 miles.

The work of the members of the outside service under my supervision has, as a general rule, been satisfactorily performed. In addition to their usual work a number of the agents were required to distribute the seed grain supplied to their respective districts. This was undertaken at their busiest season and as a consequence entailed much additional labour. The distribution was carried out most satisfactorily. Especially was this the case at the Calgary agency where the members of the staff performed the work without the aid of the North-west Mounted Police and at a great deal of personal discomfort owing to the prevalence of high winds and dust storms.

On the 31st March the building occupied by the Dominion lands office, Regina, was destroyed by fire. Most of the records, however, were saved and little inconvenience has been caused.

Since my last report the following changes have taken place in the personnel of the staff:—

On the 1st July, 1895, Mr. W. H. Stevenson, Dominion lands agent, Regina, and Mr. Thomas Anderson, Dominion lands and Crown timber agent, Edmonton, were, owing to age, superannuated.

The duties of Mr. Stevenson's position are now performed by Mr. A. J. Fraser, the assistant, and it will not, therefore, be necessary to appoint an additional officer to fill the vacancy caused by Mr. Stevenson's retirement.

Mr. R. A. Ruttan, formerly assistant secretary to the Dominion lands board, was transferred to Edmonton to succeed Mr. Anderson.

The staff of the Dominion lands agency, Winnipeg, has been reduced by the resignation of Miss Ruttan, while Mr. Alexander Norquay was transferred from your office to assist in the sub-agency at Lake Dauphin.

On August 1st Mr. A. E. Hetherington, assistant in the Coteau agency, succeeded Mr. C. E. Phipps as agent, and the latter was reduced to the position of assistant. This change was brought about as a result of the unsatisfactory way in which the business at this agency was conducted.

On the 30th September the sub-agency at Beaver Lake, opened in the spring of 1894 to accommodate the settlers then going into that district, was closed owing to the falling off of business, and the services of the sub-agent, Mr. Joseph Kildahl, were dispensed with. During the time Mr. Kildahl was in the service of the department he was a painstaking official.

A statement giving an outline of the work performed at the several Dominion lands agencies during the past ten months is herewith enclosed. In preparing this statement upwards of 1,150 returns were examined by this office.

During the period covered by this report, in addition to the ordinary correspondence of my office, a large number of reports on matters referred to me, in my capacity as a member of the board, have been prepared.

I have the honour to be, sir,
Your obedient servant,

J. M. GORDON,
Inspector of Dominion Lands Agencies.

STATEMENT giving an outline of the Work performed at the several Dominion Lands Agencies during the 10 months ended 31st October, 1895.

AGENCY.	Homestead Entries.	SALES.		ENTRIES CANCELLED.		Mining Locations Recorded.	Hay Permits Issued.	Applications for Homestead Patent Approved.	LETTERS.		Returns to Head Office.
		Pre-emptions.	General.	Homesteads	Pre-emptions.				Received.	Sent.	
Battleford	2		‡2	3	1		78	10	223	436	53
*Beaver Lake	47			39			1	8	213	322	101
Calgary	86	1	9	54	13	4	177	42	1,583	1,433	294
Coteau	33			71	11		70	59	1,791	1,409	56
Edmonton	183	6	7	78	6	1	49	105	1,882	1,812	53
Kamloops	39	†11	6·1‡	8		1	8	23	1,037	985	49
§Lake Dauphin	231		3				126				
Lethbridge	106		10·1‡	18	4	2	27	18	976	821	45
Little Saskatchewan	142	3	4	165	30		170	109	2,274	2,268	50
New Westminster	11	†29	9	2		1		42	1,991	1,819	40
Prince Albert	95	2	1	44	8		86	38	1,006	1,060	40
Qu'Appelle	166	5	5	90	56		361	208	4,476	3,476	47
Red Deer	200		3	79	7		125	72	1,475	1,176	46
Souris	242	6	7	215	59		690	284	8,447	7,555	58
Swift Current	15			5			14	6	202	278	44
Touchwood	87	1	3	63	21		236	64	1,802	1,878	46
Wetaskiwin	309		3	169			14	9	1,130	1,764	42
Winnipeg	120	6	12·1‡	81	11	2	549	134	5,835	6,024	52
Total	2,114	70	87	1,184	227	11	2,781	1,231	36,343	34,516	1,116

* This agency was closed on the 30th September. † Homesteads sold. ‡ Town site. § Lake Dauphin does not make a return showing work performed.
Homestead and sales entries granted are reported through Little Saskatchewan office.

J. M. GORDON,
Inspector of Agencies.

No. 4.

TIMBER, MINERAL AND GRAZING LANDS.

DEPARTMENT OF THE INTERIOR,
OTTAWA, 2nd December, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior, Ottawa.

SIR,—I have the honour to submit the fifteenth annual report of the Timber, Mineral and Grazing lands branch of the Department of the Interior. Statements prepared by Mr. F. Loyer, bookeeper of this branch, show that the revenue derived from the Crown timber, grazing, hay and mineral lands, but exclusive of sales of mineral lands, between the 1st of January and 31st of October, 1895, inclusive, amounted to $73,620.28, and the revenue for the corresponding ten months of last year $90,584.46.

The statements in question, lettered A. B. and C., together with reports of the Crown timber agents at Winnipeg, Man., Calgary, N.W.T., Edmonton, N.W.T., Prince Albert, N.W.T., and New Westminster, B.C., are appended hereto. The above amounts include the dues on timber, grazing, and hay cut on School lands.

The revenue between the 1st January and the 31st October, 1895, inclusive, was less than that of last year between the same dates, by $16,964.18. There was a decrease for timber dues of $7,357.14, for grazing lands of $10,713.41, for coal lands of $127.80, for stone quarries of $413.91, but an increase for hay dues of $1,612.08, and for mining fees of $36.

For the sake of reference and comparison, statements lettered D. and E. showing both by departmental and fiscal years, the revenue received from timber, mineral, grazing and hay lands, from the year 1872 up to the 31st of October, 1895, not including sales of mineral lands, have also been prepared and will be found at the end of this report.

These statements do not include the revenue from School lands, but statement lettered "F" appended hereto shows the revenue for the fiscal year 1894-95, and statement lettered "G" shows the revenue from this source up to the 30th June, 1895.

The total revenue of the Winnipeg office from 1st January to the 31st October, 1895, inclusive, amounted to $28,223.30, being a decrease of $3,231.60 as compared with the revenue of the corresponding ten months of last year, which amounted to $31,454,90.

The prices of pine lumber and spruce within the Winnipeg agency were $19 and $17 per thousand feet B.M., respectively. There are 31 mills in operation within the agency cutting under Government license.

The revenue received from the British Columbia Crown timber agency from the 1st January to the 31st October, 1895, inclusive, was $16,642,34, being a decrease of $3,186.68. Of the amounts collected the sum of $263.74 has been received as bonuses for berths put up to public competition. The total area acquired was about 8.28 square miles, averaging a bonus of $31.85 per square mile.

The total quantity of lumber manufactured for the year amounted to 10,042,087 feet B. M,, as compared with 14,475,717 feet B. M. for last year, and sold at the rate of $7.00 to $9.00 per thousand.

There are 11 mills within this agency operating under license from the Dominion Government

The total amount of dues collected within the Calgary agency from 1st January to the 31st October, 1895, inclusive, amounted to $6,061.00, being an increase of $411.63 as compared with last year.

The price of lumber at Calgary was from $8.00 to $16.00, and at Fort McLeod $10.00. Eight saw-mills were operating within this agency last year under Government license.

The total amount of dues collected within the Edmonton agency from the 1st January to the 31st October, 1895, inclusive, amounted to $3,352.66 being a decrease of $513.62 as compared with last year. The price of lumber at Edmonton during the year was $13.00 to $16.00 per thousand feet B.M. The agent reports eight saw-mills in operation within this agency.

The total amount of dues collected within the Prince Albert agency from the 1st January to the 31st October, 1895, inclusive, was $4,515.97, being a decrease of $840.70 as compared with the same period of last year. Lumber sold at Prince Albert from $8.00 to $25.00 per thousand feet. There are three saw-mills in this agency cutting timber under license.

Saw-mill returns received at the head office gave the following quantities of building material as having been manufactured and sold during the year within the five agencies :—

	Manufactured.	Sold.
Sawn lumber	30,010,491 feet.	30,138,429 feet.
Shingles	5,316,890	4,488,950
Laths	748,500	656,450

One hundred and forty-seven licenses to cut timber over a total area of 2,811.06 square miles were prepared during the year. The area licensed in the Province of Manitoba, the three provisional territorial districts, and on Dominion lands in the Province of British Columbia, are as follows :—

	Miles.
Manitoba	727.51
Alberta	1,359.40
Assiniboia	59.75
Saskatchewan	246.54
British Columbia	417.86

The number of applications received during the year 1895, to 31st October, to cut timber was 69, of which 64 were for licenses and permits to cut timber in Manitoba and the North-west territories, and the remainder to cut timber on Dominion lands in British Columbia.

Within the past year eleven berths have been cancelled, owing to the persons to whom they were granted not having complied with the provisions of the regulations. The total area of these berths was approximately 125 square miles. The number of berths still in force in the province and territories is 261, and on Dominion lands in British Columbia, 136.

The following statements shew the timber limits within the several Crown timber agencies.

Department of the Interior.

WINNIPEG AGENCY.

Limit.	License.	Name.	Locality.	Area.	Date Last Mill Return.
				Sq. Miles.	
1	(Lease)	Chas. S. Hoare.....	Lake Winnepegosis...	48	Not operating.
15-16	(Lease)	Legal representative of Patrick Kelly.	do do ...	80	do
14-18, 11-12.	do	do do	do do ...	141	do
1 and 2	10	D. E. Sprague.....	Roseau River.....	9·5	Qr. 30th Sept., 1895.
No T. B.	2, 4 and 6	T. W. Ferguson.....	Bird-tail Creek.....	78·75	do do
do ..	3	W. H. Whimster.....	Tp. 19, Rg. 21, W 1st M.	3	do do
do ..	5	F. A. Fairchild....	Tps. 19 & 20, Rg. 20, W 1st M.	15	Qr. 30th June, 1895.
14	90	A. Ferguson.....	Shell River.....	50	Not operating.
15 A, 15	91	do	do	50	do
23	92	do	do	50	do
25, 25 A	233	do	do	50	do
16	21	David Ross.....	Near Whitemouth River.	120	Qr. 30th Sept., 1895.
26, 26A, 26B	122	H. B. Mitchell.....	Shell River.....	12 1/16	do do
26 c	Not issued	do	Lake Winnipeg.....	10	do do
26 d	do ..	do	Near Sand River.....	9·625	No return.
48	112	do	Little Boggy Creek...	33·5	Qr. 30th Sept., 1895.
27, 27A, 27B, 28A, 28.	140	Asessippi Milling Co..	Shell River.....	47 1/16	do do
92	53	M. K. Dickinson.....	Little Swan River.....	50	Not operating.
356	.....	V. B. Wadsworth.....	Red Deer River.....	50	do
410	55	D. McFayden.....	Tp. 17, Rg. 16, W 1st M.	8·25	Qr. 30th June, 1895.
544	113	Wm. Robinson.. ...	Bad Throat River.....	5·6	do do
546	Not issued	Imperial Bank of Canada, W'p'g., Man.	do do	49·14	Not operating.
547	97	J. A. Christie.....	Tp. 33, Rg. 3, W 2nd M.	42·25	do
Part. D, 551	131	W. A. Allan.....	Tps. 22 & 23, Rgs. 18 & 19 W 1st M.	36	do
551 A. B. C	.....	do	Pewei and Etoimami Rivers.	99·41	do
551 D	173	Chs. Geekie..... ...	Tp. 23, Rg. 19, W 1st M.	18	Qr. 30th Sept., 1895.
554	124	D. E. Sprague.....	Two islands, Whitemouth Lake.	2	Not operating.
555	136	D. McFayden.....	Tp. 18, Rg. 16, W 1st M.	16	Qr. 30 June, 1895.
563	No license.	Pas Band of Indians..	Salt Channel near Carrot River.	250	
567	196	Peter McArthur.....	Fairford River.....	69	Qr. 30th Sept., 1895.
568	Not issued	T. W. W. Bready.....	Tp. 18, Rg. 7, E. coast M	10,480 acres. Sq. Miles.	Not operating.
571	do ..	James Shaw.....	Tps. 25 & 26, Rg. 25, W 1st M.	40	Qr. 30th Sept., 1895.
575	220	John Watson.....	Tps. 22 & 23, Rg. 20, W 1st M.	18	Qr. 30th June, 1895.
576	166	Thos. & Jas. Shaw....	Tp. 24, Rg. 20, W. 1st M.	1·5	Qr. 31st Dec., 1894.
578	Not issued	D. H. Harrison.....	Tp. 23, Rg. 18, W 1st M.	14	Qr. 30th June, 1895.
580	do ..	G. T. Orton.....	Black Bear Island....	3	Not operating,
Part 581	178	J. A. Christie.....	Tp. 19, Rg. 19, W 1st M.	16	1st May, 1895.
585	152	George Kerr.....	Tp. 8, Rg. 7, Tp. 17, Rg. 17, Tp. 18, Rg. 16, W 1st M.	·75	Qr. 30th Sept., 1895.
586	Not issued	H. B. Mitchell.....	Ten Mile Lake.....	24	Not operating.
587	do ..	David Ross.....	Whitemouth River....	16	Qr. 30th Sept., 1895.
588	168	W. H. Atkinson.....	Tp. 1, Rg. 20, W 1st M.	563·7 acres.. Sq. Miles.	do do
589	Not issued	David Ross.....	Whitemouth River....	50	No return.
590	do ..	do	Dawson Road.....	50	do
592	174	Thomas & Rothwell...	Tp. 18, Rg. 3, E.....	3·75	Qr. 30th Sept., 1895.
599	171	John Andrew.....	Tp. 19, Rg. 19, W 1st M.	2	Qr. 30th June, 1895.
601	Not issued	David Ross..... ...	Whitemouth River....	86	No return.
603	201	Joseph T. Thomas....	Tp. 18, Rg. 3, E.....	2	Qr. 30th Sept., 1895.
604	Not issued	H. B. Mitchell..	Lake Winnipeg.....	10	Qr. 30th Sept., 1895.
605	228	Drake & Co.....	do	10·7	do
609	Not issued	McRae, Rochester & Charette.	Part on shore of Long Lake.	50	Not operating.
613	207	H. H. McCorquadale..	Tp. 2, Rgs. 20 & 21, W 1st M.	3	Qr. 31st March, 1895.

WINNIPEG AGENCY—*Concluded.*

Limit.	License.	Name.	Locality.	Area.	Date Last Mill Return.
				Sq. Miles.	
615	217	F. A. Fairchild.	Tp. 19, Rg. 19, Tp. 18, Rg. 19, Tp. 19, Rg. 20, W. 1st M.	7·93	Qr. 30th Sept., 1895.
617	Not issued	B. E. Chaffey.	Pigeon River.	40	Not operating.
618	do ..	J. A. Christie.	Tps. 21 & 22, Rg. 21, W. 1st M.	10	1st May, 1894.
619	216	Friesen, Reimer & Co..	Tp. 4, Rg. 9 E 1st M..	12·46	Qr. 30th Sept., 1893.
621	Not issued	Wm. Robinson.	Bad Throat River.	25	do
622	218	do	Black River	14	do
624	237	D. E. Sprague.	Between Lake of the Woods and Whitemouth Lake.	35·35	do
625	212	F. L. Engman.	Tp. 18, Rg. 17, W. 1st M	3	Qr. 30th June, 1895.
629	Not issued	John Pollock.	Tp. 33, Rg. 3, Tp. 34, Rg. 4, W 1st M.	10·83	Qr. 30th March, 1895.
630	232	Hooker & Co.	Humbug Bay.	6·13	Qr. 30th June, 1895.
632	Not issued	C. Jones.	Lake Winnipeg.	4	Not operating.
637	214	Geston & Mitchell	Tp. 23, Rg. 3, E	2·75	30th Sept., 1895.
648	Not issued	J. D. McArthur	Tp. 21, Rg. 24, W 1st M.	1	Not operating.
659	do ..	Drake & Co.	Lake Winnipeg.	12	Qr. 30th Sept., 1895.
660	do ..	Wm. Robinson.	do	5	do
662	do ..	J. A. Christie.	Tp. 21, Rg. 21, W 1st M.	1,920 acres	Not operating.
				Sq. miles.	
670	do ..	do	do ..	1	do
672	do ..	Isaac Riley.	Near Humbug Lake.	3	Qr. 30th Sept., 1895.
676	do ..	F. L. Engman.	Tp. 19, Rg. 18, W 1st M.	4	No return.
700	do ..	Hooker & Co.	Punk Island.	4	do
702	do ..	H. B. Mitchell.	Lake Winnipeg.	2	do

EDMONTON AGENCY.

39	52	Daniel R. Fraser.	N. Saskatchewan River	45·84	Qr. 30th June, 1895.
9	Lease 15	Geo. Burn.	Red River	30	Qr. 30th Sept., 1895.
199, 200 203, 204 242A	46	Alberta Lumber Co.	South shore Clearwater Lake.	251·80	Not operating.
425	Not issued	do ..	do ..	35¼	do
305	do ..	James Nosworthy	N. Saskatchewan River	50	do
441	95	John White.	Brazeau River	50	do
325	94	do	District Alberta	50	do
447	Not issued	Donald McLeod	Baptiste River.	50	do
465	do ..	James Elliott.	North of N. Saskatchewan River.	50	do
480	do ..	A. Forbes	North of Saskatchewan River.	50	do
496	87	Bank of Ottawa.	N. Saskatchewan River	50	Qr. 31st Oct., 1895.
302	83	Geo. Burn	do ..	3·75	Not operating.
542	98	Lamoureaux Bros.	Proximity T. B. 496.	24·5	Qr. 30th Sept., 1895.
623	199	Thomas R. Haddon.	Tp. 56, Rg. 24, W 6th M.	2	Qr. 30th June, 1895.
627	231	Fraser & Co	Tps. 49 & 50, Rg. 5, W 5th M.	8·24	Qr. 30th Sept., 1895.
645	Not issued	William Short.	Tps. 51 52, Rg. 27, Tp. 51, Rg. 28, W 4th M.	6	do
646	238	A. J. Fraser.	Tp. 50, Rg. 4, W 4th M.	5	do
653	Not issued	Walters & Humberstone	Tps. 51, Rgs. 26 & 25, W. 4th M.	4·25	do
673	Not issued	Philip Ottewell & Co..	District of Alberta.	9	do
674	do ..	do ..	do	9	do
686	do ..	Wm. Short.	Tps. 50 & 51, Rg. 1, W 5th M.	8·75	No return.

Department of the Interior.

CALGARY AGENCY.

Limit.	License.	Name.	Locality.	Area.	Date Last Mill Return.
				Sq. miles,	
34	30	James Walker	Bow River	42·29	Qr. 30th June, 1895.
36	99	Hon. Peter McLaren	S. Fork, Old Man Riv.	50	Qr. 30th Sept., 1895.
36A	117	do	Middle do	50	do
179	86	do	do do	50	Not operating.
252	115	Hon. Peter McLaren	Red Deer River	47·85	do
253	114	do	do	50	do
455	176	do	do	48·93	do
80	45	Alberta Ry. & Coal Co.	Near South Fork of Old Man River.	50	Qr. 30th June, 1894.
105	39	Alberta Lumber Co.	Red Deer River	47	Qr. 30th June, 1895.
106	36	do	do	47·34	do
185	37	do	do	48·75	do
186	38	do	do	47·7	do
192	183	Charles Beck	N. Fork, High River	47·08	Not operating.
318e,f,g,h,i,j	88	Eau Claire and Bow	Bow River	116·11	1st May, 1895.
417	88	Riv. Lumber Co.			
380	93	The Calgary Lumber Co	Tps. 27-8-9, Rg. 5, W 5th M. Tps. 27-8, Rg. 6, W 6th M.	5	Not operating.
382	23	Louis Sands	Cypress Hills	17·5	do
468	111	James Quinn	Little Red River	50	do
533N	118	Alberta Ry. & Coal Co.	Bow River	50	Qr. 30th June, 1894.
550 O & P	126	G. H. Lewis	do	27·37	Not operating.
552	Not issued	John McNamara	Cascade River	5	do
559	128	Donald Morrison	Near S. Fork, Sheep Creek.	3·41	do
569	170	John Lineham	S. Fork, Sheep Creek	21·33	Qr. 31st March, 1894.
573	No license	Dept. of Indian Affairs	Tp. 9, Rg. 3, W 4th M.	11·35	
582	do	do do do	Belly River	6·5	
579	213	W. D. Lineham	N. Fork, High River	33·32	Not operating.
583	143	C. O. Card	Tp. 1, Rg. 27-8, W 4th M.	4	Qr. 30th June, 1895.
593	Not issued	M. S. Cross	Vicinity, Pincher Creek	7	Not operating.
594	190	John Lineham	S. Fork, Sheep Creek	6·13	Qr. 30th June, 1895.
606	206	A. W. Gillingham	N. Fork, Old Man Riv	3	do
631	229	D. W. McKenzie	Tp. 42, R. 25, W 4th M.	·25	Not operating.

PRINCE ALBERT.

19	(Lease)	Edward Murphy	Pelican Lake	101	Not operating.
A66	33	Geo. Burn	Near Junction, Rabbit Creek.	47⅛	Qr. 30th Sept., 1895.
245	49	do	Little Red River	50	do
320	80	do	Fox & Upper Rabbit C'k	50	do
474	79	do	Sandy Lake	50	do
564	Not issued	Daniel Shannon	Little Red River	1	Qr. 30th Sept., 1895.
595	do	Moore & Macdowall	N. Saskatchewan Riv.	2	Not operating.
598	192	James Sanderson	Tp. 52, Rg. 1, W 3rd M.	6	Qr. 30th Sept., 1895.
616	225	Moore & Macdowall	Stoney Lake	38·59	Not operating.
633	230	James Sanderson	Tps. 51-2, Rg. 1, W 3rd M.	4·12	Qr. 30th Sept., 1895.
563	Not issued	Pas Band of Indians	W. End, Salt Channel.	250 acres. Sq. miles.	
691	do	Geo. Burn	Dist. Saskatchewan	10·19	No return.
698	do	Moore & Macdowall	Tp. 23, Rg. 4, W 3rd M.	5	do

NEW WESTMINSTER, B.C.

Limit.	License.	Name.	Locality.	Area.	Date. Last Mill Return.
A	119	Knight Bros	S. Cheam Indian Res.	680 acres	Qr. 30th Sept., 1894
48	Not issued	do do	Near James' Lake	3,520 do	do do
61	153	do do	Tp. 2, 3, r 29, w 6th m.	130.33 do	do do
B	102	British Columbia Mill Timber and Trading Co.	Tp. 7, Lot 362, Gp 1, New West.	3,520 do	Qr. 30th Sept., 1895
H	108		Tp 2, Lot 33, Bk. 5, Rg. 2, W 6th M.	1,120 do	do do
L	109		Tp. 7, New West	640 do	do do
86	Not issued	Royal City Plg Mills Co	New West'r District	420 do	do do
87	do	do do	Tps. 2, 38, Rg 1, W	640 do	do do
98	do	do do	Near Stave Lake	400 do	do do
				Sq. miles.	
99	do	do do	Tp. 41, New West'r	1·25	do do
10, 11	105	Columbia Riv. Lbr Co.	Quartz Creek	4	Not operating
19	Not issued	do do	Columbia River	24	do do
21	125	do do	Blackberry & Col Rivrs	33·78	do do
27	130	do do	Columbia River	1	do do
30	130	do do	Beaver River	4·40	do do
40	Not issued	do do	Stoney Creek	10·25	Qr. 30th June, 1895.
42	177	do do	Columbia River	12	do do
70	Not issued	do do	do do	50	Not operating
14 / 15	204	do do	do do	91·53	do do
47	205	do do	Blackwater Creek	22·66	do do
65	Not issued	do do	Wait-a-bit Creek	27	do do
66	180	do do	Sec. 24, Tp. 20, Rg. 10, W 6th M.	542 acres	do do
73	Not issued	do do	Columbia River	27 do	do do
74	do	do do	do do	27 do	do do
105	do	do do	do do	6 do	do do
50 C	155	McLaren, Ross Lbr Co.	Chilliwhack River	6720 do	Qr. 31st March, 189
55	Not issued	do do	Tps. 19,22,25 E Coast M	15900 do	do do
83	do	do do	Railway Belt, B. C	362 do	do do
33	146	Brunette Saw Mill Co.	Stave Riv & Stave Lake	4324·2 do	30th Sept., 1895.
44	167	do do	Bks 12, 3, 4, Prov. B.C.	2206·52 do	do do
Block 5, 44	221	do do	Lillooet River	160 do	30th June, 1895.
68	195	do do	Tp. 6, Rg. 7, W 7th M.	2,670 do	31st March, 1895.
				Sq. miles.	
90	156	do do	Lts 14,15, 22, 23, 24, 25 26, 27, Blk. 5, N Rg. 1 New West.	2	30th Sept., 1895
96	188	do do	Stave River	641 acres	do do
122	215	do do	Tp. 21, E Coast M	320 do	Qr. 31st March, 1895
125	Not issued	do do	Near Burrard Inlet	530 do	Qr. 30th Sept., 1895
C	100	Thomas Cahill	Tp. 4, Dis. New West'r	960 do	Not operating.
M	159	Henry West	Stave River	639 do	Qr. 30th June, 1895.
103	189	do	do	163 do	do do
K	107	Grant & Kerr	Tp. 2, Dist. N. West'r.	360 do	do do
Q	141	do do	Tp. 1, do do	640 do	do do
51	Not issued	do do	Tp. 2, Gp. 2, N. West.	640 do	do do
O	184	H. V. Edmonds	Tp. 39, North Dis. New West.	1,600 do	Qr. 31st Dec., 1893.
54	Not issued	do	Tp. 2, Rg 29, W 6th M.	1,120 do	do do
T	121	H. T. Thrift	Tp. 7, Dist. New West.	320 do	Qr. 30th June, 1894.
57	150	Huntingdon L'br Co.	Tp. 16, Dist. New West.	1,920 do	Qr. 31st Dec., 1893.
52	157	E. A. Wyld	Tp. 39, Dist. New West.	876·3 do	do do
69	149	do	Tp. 39, W Coast M	354 do	do do
109	222	do	Tp. 12, E. Coast M., Dist. New West.	160 do	do do
R	120	Wilson, Murphy & McRae.	Tp. 2, Rgs. 1, 2, Dist. New West.	3,200 do	Not cutting.
V	175	W. A. Allan	Tp. 35, Rgs. 27, 28, W 6th M.	1,728 do	do do
				Sq. miles.	
39	Not issued	do	Tp. 39 & Tp. W of Tp. 39, Dist. New West.	8·63	do do
46	181	do	Tp. 5, Rgs. 27, 28 W 6th M.	760 acres	do do

NEW WESTMINSTER AGENCY—*Continued.*

Limit.	License.	Name.	Locality.	Area.	Date Last Mill Return.
				Sq. miles.	
W	138	Dobbie, Davidson & Strathy.	Tps. 4, 2, 12, Dist. New West.	10,720 do	Not operating.
				Sq. miles.	
Z	154	Dobbie, Davidson & Strathy.	Upper and Lower Lillooet Lakes.	13	do do
X	197	Thomas L. Briggs....	Tp. 15, E. Coast M, Dist. New West.	4,800 acres	Qr. 31st March, 1895.
79 }					
101 }	198	do do	Tps. 3, 4, Rgs. 3, 4, W	2,240 do	do do
Y 1, 2		do do	7th M.	163·86 do	do do
	182	Mossom Boyd Co.....	Up. & Low Lillooet Lks	3,093 do	Not operating.
				Sq. miles.	
3	103	W. C. Wells.....	Kicking Horse River..	2	Qr. 30th June, 1895.
28	Not issued	do	do do ..	1 do	do do
29	202	do	Tp. 25, Rg. 19, W 5th M.	13·16 do	do do
5	134	I. R. & T. R. Reilly...	Kicking Horse River and Beaver Creek.	11·65 do	Qr. 31st March, 1895.
16	200	J. W. Bryson.....	Columbia River.....	15·55 do	Qr. 30th Sept., 1895.
17	241	Hon. Geo. Bryson.....	do do	16·5 do	do do
18	Not issued	John Dill	do do .. .	50 do	Qr. 31st March, 1895.
20	142	T. Long & Bros.....	Blue Water River ...	34·80 do	Not operating.
23	Not issued	T. H. Allen	Illecillewaet River....	10	Not operating.
26	do ..	David Ward.....	Columbia River.....	50	Qr. 31st March, 1895.
32	do ..	Geo. Goodwin	Illecillewaet River....	1	Qr. 30th Sept., 1893.
75	do ..	John Nicholson.....	Tp. 13, New West. Dist.	640 acres.	do do
84	do ..	do do	Tp. 16 & 13 N. W. Dist.	1,740 do	do do
				Sq. miles.	
38	169	Wm. Caldwell.....	Coquitlam and Gold Creek.	14·5	Qr. 31st March, 1895.
43	162	E. A. Wilmot & Co...	Tps. 4 & 5, Rg. 28, W 6th M.	2·633	Qr. 30th June, 1895.
36	123	Thos. W. Patterson...	Tp. 39, Gp. 1, D. N. W.	1,371·2 acres	Qr. 31st March, 1895.
58	137	do do ...	Tp. 39, Dist. New West.	480 do	do do
94	210	do do ...	Tp. 39, W of Coast M..	480 do	do do
110	Not issued	do do ...	Tp. 39, Dist. New West.	384 do	do do
111	211	do do ...	Tp. 39, W of Coast M..	640 do	do do
45	Not issued	Shuswap Milling Co...	Spallumcheen River...	20,613 do	Qr. 30th June, 1895.
				Sq. miles.	
64	187	do do ...	Illecillewaet River....	1·478	do do
49	133	Stein & Robinson. ...	Tp. 23, Rg. 2 W 6th M.	560 acres	Qr. 30th Sept., 1895.
63	194	Jos. Martin & Sons...	Harrison Lake	960·64 do	Qr. 30th June, 1895.
91	191	Martin Bros.	Tributary Harrison L.	640 do	do do
				Sq. miles.	
67	Not issued	C. H. Carrière.....	Hospital Creek.....	1½	Not operating.
71	163	Genelle Bros.....	Tp. 22, Rgs. 10 & 11, W 6th M.	2,560 acres	Qr. 31st. Dec., 1894..
				Sq. miles.	
72	186	do	Salmon Arm of Shuswap Lake.	4·79	do do
78	165	do	Tp. 21, Rg. 10, W 6th M.	2,118 acres	Qr. 30th Sept., 1895.
				Sq. miles.	
88	185	do	Columbia River.....	4·22	Not operating.
114	Not issued	do	do do	9	do
119	219	do	Salmon Arm of Shuswap Lake.	393 acres	Qr. 30th Sept., 1893.
				Sq. miles.	
127	Not issued	do	Columbia River.....	3	Qr. 31st March, 1895.
128	do ..	do	do do	1	do do
129	do ..	do	Tp. 22. Rg, 10, W 1st M.	2,120 acres	do do
77	148	T. J. Hammill.....	Tp. 39 Dist. New West.	384 do	Not operating.
80	172	do do	Tp. 4, Rg. 4, W 6th M.	149 do	do
				Sq. miles.	
85	Not issued	S. Barber..... ...	Columbia River.....	79	Qr. 30th June, 1894.
89	do ..	do	do do	3	do do
92	240	F. P. Armstrong	do do	2	Qr. 30th Sept., 1893
104	Not issued	J. F. Armstrong....	do do	¼	Not operating.
106	do ..	A. R. Stephens.....	Stave River..... .. .	4,830 acres	do
				Sq. miles.	
108	do ..	George A. Keefer.....	Near source Shuswap River.	64·75	do

NEW WESTMINSTER AGENCY—*Concluded.*

Limit.	License.	Name.	Locality.	Area.	Date Last Mill Return.
				Sq. miles.	
112	Not issued	Fred. Robinson.	Columbia River.... ..	3	Qr. 30th Sept., 1893.
113	do ..	do do	do do . . .	3	do do
123	do ..	do do	Tp. 23, Rg. 2, W 6th M.	240 acres	do do
				Sq. miles.	
116	do ..	D. Robinson.....	Beaver River.....	4	Not operating.
117	do ..	do do	do do	4	do
118	do ..	do do	Columbia River. . .	9	do
120	do ..	W. H. Kendall, M.D..	Burrard Inlet, Tp. 6, Rg. 7, W 7th M.	813 acres	Qr. 30th June, 1895.
126	236	James Hartney.....	Tp. 39, Dist. New West.	265 do	Qr. 30th Sept., 1894.
130	224	E. B. Knight	4 small islands in the Fraser River.	1,500 do	Qr. 31st March, 1895.
131	Not issued	C. J. Major.	Tp. 39, W of Coast M..	627 do	No return.
132	236	James Hartney.	North Arm of Burrard. Inlet.	186·5 do	do
133	Not issued	do do	Tp. 39, W of Coast M..	521 do	do
134	239	Peter Genelle & Co....	Tp. 22, Rg. 10, W 6th M.	176 do	Qr. 31st March, 1895.
136	Not issued	Geo. Finney....	Near and adjacent Bonapart Indian Reserve.	1,200 do	No return.
138	do .	J. W. McRae.....	Tp. 18, E. Coast M....	985 do	do
139	do ..	Jos. Genelle.....	Tp. 22, Rg. 11, Tp. 23, Rg. 11, Tp. 23, Rg. 10, W 6th M.	1,120 do	do
140	do ..	do do	Tp. 24, Rg. 8, W 6th M..	960 do	do
141	do ..	do do	Tps. 21 & 22, Rg. 8, W 6th M.	960 do	do

MINING LANDS OTHER THAN COAL.

Returns from the Dominion lands agents show that during the past year to 31st October 20 entries were made for mining locations other than coal. No sales were made this year, but the sum of $97 was received in payment of fees for entry and for the registration of assignments. The total area of mining locations sold up to the 1st of January, 1895, was 2,481.87 acres, which realized $12,892.24.

All minerals, with the exception of coal, on Dominion land within the railway belt in the province of British Columbia, are administered under the mining laws of that province. This is in accordance with an arrangement been the Federal and Provincial Governments, and ratified by orders in council dated the 11th and 28th of February, 1890. This agreement may be terminated at any time by either government.

By an order in council dated the 25th of August, 1891, petroleum lands were withdrawn from the operations of the mining regulations.

COAL MINING LANDS.

The number of applications received during the first 10 months of this year was 31. The revenue for the year derived from the sale of coal lands was $105. The total area of coal lands sold up to the 1st of November, 1895, was 15,466.96 acres, and the total amount received therefor was $156,583.53.

GRAZING LANDS.

The total number of leases of grazing lands other than school lands in force on the 1st of November, 1895, was 185, which covered an area of 904,186.73 acres.

The following schedule shows the names of the lessees, the numbers of their ranches, and the area covered by each lease:—

Ranche No.	Name.	Area in Acres.	Ranche No.	Name.	Area in Acres.
1	North-west Cattle Company	44,000	369	J. & W. Potts	741
2	do do	58,925	373	John Cooil	1,280
11	Alexander Begg	320	374	L. C. Brown	640
16*b*	D. McEachran	16,665	377	John Cheeseman	320
35	North-west Cattle Company	55,000	378	J. R. Craig	2,560
35*a*	Moore & Martin	31,496	380	R. G. Robinson	800
36	C. W. Martin	58,390·50	385	W. N. Adsit	1,120
38	Alfrey & Brooke	10,000	386	H. G. Hurlbert	640
42	Messrs. Warner & Goddard	25,999·50	388	Canada Agricultural Coal and Colonization Company	320
45	Wells & Brown	12,000	392	Joseph Dugan	385
56	Bell Bros	3,456	393	W. H. Moodie	56
59*a*	C. W. Martin	37,066	394	Leslie Hill	1,280
74	Sir John Walrond	33,248	395	John Cooil	480
82	Walrond Ranche Company	56,000	398	John Harvey	597·50
93	Garnett Bros	20,000	400	Ronald Greig	2,560
101	Alberta Ranche Company	25,510	401	J. P. Tully	532
104	W. B. Irving	5,280	402	Chas. E. Stevens	160
108	D. McDougall	6,000	403	Mrs. H. Surrey	640
116	N. Boyd	3,920	405	G. W. Quick	1,200
120	M. Oxarart	11,000	406	James Nicholson	2,560
137	Brown Ranche Company	33,500	408	J. S. Rose	2,560
141	P. McLaren	7,500	410	James Hastie	640
153	Captain W. Thorburn	2,774·50	412	Leslie Hill	1,280
154	D. McEachran	14,325	413	H. A. Greely	2,160
167	Glengarry Ranche Company	22,000	414	A. T. Wallace	640
201	A. Adsit	1,760	415	S. T. Fawcett	800
244	A. McLeod	960	416	David Bartram	1,124
265	Jonathan Henderson	1,280	417	Geo. A. Blair	2,516·50
289	Canadian Pacific Colonization Corporation	43,199	418	Grier & Smith	1,280
295	C. W. Martin	14,666	419	A. T. Wallace	1,260
308	J. & R. Mitchell	1,967·50	424	John Cumberland	2,240
309	Canadian Pacific Colonization Corporation	11,000	426	Fred. W. Fisher	289
310	Joseph Fisher	1,847	427	H. A. Sibbald	320
313	E. H. Maunsell	4,640	430	D. W. Newbury	640
315	H. T. Morton	640	431	Couture & Bourré	1,920
317	Francis White	25,739	432	Henry Hamilton	2,240
318	F. W. Peecock	478·29	433	Ed. Heffer	640
320	Charles Carey	1,920	436	Arthur Trent	1,280
321	James Fidler	1,600	437	Solyme Lajoie	320
321*a*	James Fidler	640	438	J. R. Davis	2,576
327	P. Byrne	480	439	Wm. R. Abbott	1,440
328	J. Mitchell	1,997·30	442	A. W. Bragg	960
329	Lachlan Collie	306·50	343	McKay & Balding	2,560
331	F. Murray-Honey & Lewis Parsons	5,280	444	Wm. Strothers	640
333	R. G. Robinson	1,120	445	Wm. Trent	1,920
334	William Collie	160	446	H. H. Fauquier	320
335	Thomas J. Spence	319	448	Walter B. Elliott	640
341	G. J. Gagen & W. A. H. a'Court	5,760	451	Thomas Monkman	445
343	Walter R. Johnson	2,400	452	Lethbridge Sheep Ranche Co.	2,560
344	A. T. Wallace	1,920	453	W. E. McCandlish	3,840
347	Jeremiah M. J. Mulvihill	259	454	Chas. W. May	320
348	Leeson & Scott	1,920	455	Donald McLean	2,088·50
349	John G. Collins	1,280	456	Heon & Duhaime	1,724·77
350	L. G. McDonald	320	457	Max de Quereize	2,402
351	Sanson & Harford	27,200	458	Rev. John McDougall	2,952
352	Thomas Johnson	2,560	459	Henri de Soras	2,211
353	W. W. Stuart	2,080	460	Samuel Fletcher	1,286
354	Sibbald & Alford	640	461	H. Prince & A. Béliveau	960
356	William Grahame	477	463	Wm. Collie	128
357	F. W. Peecock	129·65	465	J. G. Collins	1,280
358	J. & R. Mitchell	640	467	Geo. Lane	2,240
365	Neil Hanson	640	468	J. W. & F. W. Ings	720
368	Thomas Johnson	1,920	471	Hugh McAlpine	3,032
			472	R. G. Robinson	3,840
			474	Edward Fearon	5,742

LESSEES of Grazing Lands—*Concluded.*

Ranche No.	Name.	Area in Acres.	Ranche No.	Name.	Area in Acres.
475	James Warnock	1,280	528	Wm. Wilkins	160
479	John Cheeseman	160	529	John Himsworth	1,120
480	Frederick S. Smith	320	533	James Grayson	160
481	E. Jaunet & De Seysalle	2,210	537	F. Shackleton	647
482	Sarnia Ranching Co. (Limited)	3,838	538	Willard V. Hill	1,126
485	John Harvey	320	539	C. Kettles	320
486	John Lawrence	1,440	540	L. C. Brown	800
490	S. W. Hungerford	640	541	John Harvey	960
491	James Hargrave	3,044	542	Hamilton Moorehead	640
492	Emiel Griesback	77	543	D. McIntosh	288
494	James Martin	640	544	Johann Broeske	160
496	J. H. Beom	1,220	545	Rev. Leo Gaetz	320
498	John Biddle	320	546	C. Duck	166
500	Thomas Hourd	1,970	549	B. Prince	640
502	James Leslie	640	551	J. S. White	160
503	Donald Gunn	1,280	553	Champagne Bros	480
505	Philip Williams	640	557	W. S. Bilton	640
506	R. J. Christie	480	558	W. T. Warner	730
510	Cornelius Peters	160	559	Louis N. Blache	640
511	Cheeseman Bros	1,920	561	John Stewart	640
514	Edward Henry	1,280	562	J. G. Farr	320
515	C. D. Urquhart	552·72	565	Abraham Galloway	640
516	Wm. Stothers	960	567	Edward Hagell	640
517	C. Perrenoud	640	568	D. H. Cox	640
520	Henri de Soras	960	570	D. A. Best	325
521	Jonathan Gillis	1,853	571	R. J. Christie	160
522	Wm. A. McLeod	875	574	J. D. McLeod	297
523	Xavier Gougen	640			
524	Wm. Sinclair	320		Total area	904,186·73
527	H. M. Morris-Reade	619			

The total number of leases of School lands in the North-west Territories for grazing purposes in force on the 1st of November, 1895, was eleven, containing a total area of 4,805 acres. The names of the lessees and the numbers of their ranches are as follows :—

Ranche No.	Name.	Area in Acres.	Ranche No.	Name.	Area in Acres.
473	Rev. John McDougal	640·00	509	W. E. Smith	320·00
478	F. W. Godsal	605·00	518	Wm. Brealy	640.00
483	Hull Bros.	640·00	548	W. H. Minhinnick	40·00
497	J. H. Beom	640·00	550	John N. West	160·00
499	Chas. Knight	640·00	564	Wm. N. Janes	320·00
504	W. H. C. Partby	160·00			
				Total area	4,805·00

The total number of leases of school lands in Manitoba for grazing purposes in force on the 1st November, 1895, was three, containing a total area of 480 acres. The names of the lessees and the numbers of their ranches are as follows:—

Ranche No.	Name.	Area in Acres.	Ranche No.	Name.	Area in Acres.
560	John Clark	160·00	581	John T. Slater	160·00
580	M. H. Fieldhouse	160·00		Total area	480·00

HAY.

The following statement shows the names of the persons who hold leases of Dominion lands for hay purposes:—

Ranche No.	Name.	Area in Acres.	Ranche No.	Name.	Area in Acres.
342	Samuel Perry	40·00	477	Walter Bradley	40·00
440	Jonathan Rose	40·00	483	Wm. Thomson	20·00
447	Alex. McIntyre	40·00	487	W. H. Gray	40·00
450	Jas. Gilchrist	30·00	489	Frank L. Engman	40·00
469	D. M. Finlayson	37·50	512	James T. Potts	20·00
476	Henry Smith	12·00	535	Leonard Hornett	6·00
				Total area	365·50

Five leases of School lands for hay purposes have been issued, the following being the names of the lessees:—

Ranche No.	Name.	Area in Acres.	Ranche No.	Name.	Area in Acres.
361	H. Anticknap	160·00	488	M. W. Colton	149·61
404	Gagnon & à'Court	320·00	534	Chas. Moore	58·00
462	R. C. Brumpton	160·00		Total area	847·61

These lands are situated principally in the district of Alberta and the southern portion of Assiniboia, with a few tracts in the district of Saskatchewan and the province of Manitoba.

The following is a statement of the office work performed from the 1st of January, to the 1st of November, 1895 :—

Number of	letters sent	5,103
do	pages of memoranda and schedules	1,454
do	plans and sketches prepared	168
do	of notices inviting tenders for timber berths sent	5,414
Timber—		
Number of	berths applied for	69
do	berths acquired by public competition, including permits	31
do	licenses for timber berths prepared	147
Instructions	issued for survey of timber berths	11
Number of	returns of surveys of timber berths received and examined	1
do	returns of saw-mills received and verified	210
do	permits to cut timber issued by agents, also entered and checked	2,496
do	timber permits returned under affidavit and checked	2,256
do	accounts kept posted	218
do	timber seizures entered and checked	237
Grazing—		
Number of	applications for grazing lands received	226
do	leases of grazing lands authorized to be issued	80
do	do issued	52
do	leases of hay lands authorized to be issued	4
do	do issued	3
do	applications for hay lands	50
do	accounts kept posted	240
do	hay permit forms used by the Dominion lands agents, also entered and checked over at this office	2,780
do	hay permits returned under affidavit entered and checked	935
Mining—		
Number of	accounts kept posted	5
do	applications for coal locations received	31
do	coal locations of 320 acres and less sold	2
do	do do reserved for prospecting	12
do	applications for mining locations other than coal	25
do	new entries and renewals for mining locations granted by Dominion lands agents, other than coal	20
do	gold locations leased by order in council	1
do	applications for water power	1
Irrigation—		
Number of	applications *re* irrigation entered	101
do	memorials examined and recorded	70
do	plans do do	66
do	authorizations for construction of ditches issued	30

I have the honour to be, sir,
Your obedient servant,
G. U. RYLEY,
Clerk in charge of Timber, Mineral and Grazing Lands Branch.

A

STATEMENT of Receipts on account of Crown Timber on Dominion Lands for the 10 months ended on the 31st October, 1895.

Month.	Bonus.	Ground Rent.	Royalty on Returns of Sales.	Permit Fees and Dues.	Seizures, Dues and Fines for Trespass.	Miscellaneous.	Totals.
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January	285 87	3,932 70	2,271 38	1,148 35	89 30		7,727 60
February	165 50	1,152 75	1,497 51	1,522 47	237 64		4,575 87
March		145 04	500 55	2,754 86	303 50		3,703 95
April	366 00	448 40	1,996 37	801 54	145 15		3,757 46
May	67 37	5,264 79	1,686 59	422 59	150 71		7,592 05
June		2 471 75	5,440 43	2,567 71	212 80		10,692 69
July	20 00	1,033 77	1,611 90	245 31	338 27		3,249 25
August	190 00	693 19	1,218 23	761 27	248 60		3,111 29
September	142 50	250 00	1,347 16	1,366 62	320 44		3,426 72
October	278 00	1,360 85	4,666 20	2,587 12	1,132 79	21 82	10,046 78
	1,515 24	16,753 24	22,236 32	14,177 84	3,179 20	21 82	57,883 66
School lands							477 28
Grand total							58,360 94

DEPARTMENT OF THE INTERIOR,
TIMBER AND MINES BRANCH,
OTTAWA, 1st November, 1895.

B

STATEMENT or Receipts on account of Grazing, Hay and Minerals on Dominion Lands for the 10 months ended on the 31st October, 1895.

Month.	Grazing Lands.		Hay Lands.	Mining Fees.	Royalty from Coal Lands.	Totals.
	Cash.	Scrip.				
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January	123 48	160 00	84 25	5 00	10 05	382 78
February	109 62		24 45			134 07
March	731 97		36 50			768 47
April	108 42		424 55		6 00	538 97
May	116 46	1,440 00	714 15	10 00		2,280 61
June	254 79	788 00	1,472 75	15 00		2,530 54
July	433 92	100 00	1,607 87			2,141 79
August	259 46		779 43	20 00		1,058 89
September	415 01	1,123 85	241 41	27 00		1,807 27
October	148 45	560 00	141 15	20 00	30 15	899 75
Dominion Lands	2,701 58	4,171 85	5,526 51	97 00	46 20	12,543 14
School Lands	199 05		2,517 15			2,716 20
Totals	2,900 63	4,171 85	8,043 66	97 00	46 20	15,259 34

DEPARTMENT OF THE INTERIOR,
TIMBER AND MINES BRANCH,
OTTAWA, 1st November, 1895.

C

STATEMENT of Receipts for Timber, Grazing and Hay on School Lands for the of 10 months ended on the 31st October, 1895.

Month..	Timber.	Grazing	Hay.	Total.	Province of Manitoba.	North-west Territories.			Total.
						Assiniboia.	Alberta.	Saskatchewan.	
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January	85 25	.....	59 00	144 25	144 25	.....	.....	.....	144 25
February	37 00	.....	32 60	69 60	61 80	.....	.....	7 80	69 60
March	144 15	.....	49 50	193 65	193 65	.....	.....	.....	193 65
April	22 50	25 60	241 10	289 20	200 15	2 50	83 55	3 00	289 20
May	94 50	38 40	402 90	535 80	440 40	9 50	82 90	3 00	535 80
June	41 57	25 73	628 85	696 15	384 67	207 10	97 33	7 05	696 15
July	1 25	37 32	400 10	438 67	218 40	80 62	139 65	.....	438 67
August	10 00	1 60	623 35	634 95	323 25	256 70	31 30	23 70	634 95
September	.....	22 40	35 00	57 40	28 40	9 70	19 30	.....	57 40
October	41 06	48 00	44 75	133 81	94 81	14 00	.....	25 00	133 81
Totals	477 28	199 05	2,517 15	3,193 48	2,089 78	580 12	454 03	69 55	3,193 48

DEPARTMENT OF THE INTERIOR,
TIMBER AND MINES BRANCH,
OTTAWA, 1st November, 1895.

D

Statement of Receipts on account of Timber, Grazing, Hay and Minerals on Dominion Lands, commencing with the Departmental Year 1872-73, and ending the 31st October, 1895.

From 1st November to 31st October, each year,	Timber Dues.	Grazing Lands.		Hay Lands.		Rents and Bonuses from Coal Lands.	Mining Fees.	Royalty for Stone Quarried.	Rent from Mill Sites (Scrip.)	Total.
		Cash.	Scrip.	Cash.	Scrip.					
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1872-73	662 05									662 05
1873-74	2,347 00									2,347 00
1874-75	2,146 00									2,146 00
1875-76	387 00									387 00
1876-77	320 00									320 00
1877-78	1,820 00									1,820 00
1878-79	3,388 15									3,388 15
1879-80	31,339 95									31,339 95
1880-81	44,524 35									44,524 35
1881-82	75,781 26	10,123 60				80 00				85,984 86
1882-83	150,712 27	18,778 83				880 00		95 72		170,466 82
1883-84	93,765 86	10,642 50		135 20		541 30	29 00	43 19		105,157 05
1884-85	63,543 84	20,342 74		481 60		150 00	401 00	46 98		84,956 16
1885-86	70,927 70	26,723 72	20,613 29	1,223 45	80 00	40 00	190 00	27 78		119,825 94
1886-87	77,871 91	11,528 77	28,048 33	1,796 50			230 00	4 21		119,479 72
1887-88	91,538 24	5,988 42	20,260 41	3,289 57	80 00	17 10	231 75	26 75		121,432 24
1888-89	76,203 83	1,635 08	16,802 63	6,909 55		73 25	184 15	55 98		101,864 47
1889-90	102,032 58	3,056 05	9,541 63	8,235 67		68 34	181 00	137 90	160 00	123,413 17
1890-91	104,385 73	2,353 73	14,196 37	5,844 58		174 50	732 30	44 05		127,731 26
1891-92	98,967 06	4,659 59	19,914 02	5,360 40		67 70	397 33	16 80		129,382 90
1892-93	98,795 71	5,379 33	8,228 09	5,276 88		412 27	87 32			118,179 60
1893-94	77,328 85	6,479 99	12,668 14	4,592 27		174 00	66 00	413 91		101,717 16
1894, Nov. and Dec. incl.	12,840 14	1,935 36	80 00	357 19			85 00			15,297 69
1895, Jan. to 31st Oct.	57,883 66	2,701 58	4,171 85	5,526 51		46 20	97 00			70,426 80
	1,339,497 14	132,329 29	154,524 76	49,029 37	160 00	2,724 66	2,911 85	913 27	160 00	1,682,250 34

Department of the Interior,
Timber and Mines Branch,
Ottawa, 1st November, 1895.

E.

STATEMENT of Receipts on account of Timber, Grazing, Hay and Minerals on Dominion Lands, commencing with the Fiscal Year 1872–73 and ending the 30th June, 1895.

FISCAL YEAR.	Timber Dues.	GRAZING LANDS.		HAY LANDS.		Rents and Bonuses from Coal Lands.	Mining Fees.	Royalty for Stone Quarried.	Rent from Mill Sites, Scrip.	Total.
		Cash.	Scrip.	Cash.	Scrip.					
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1872-73	109 25									109 25
1873-74	2,710 55									2,710 55
1874-75	2,335 25									2,335 25
1875-76	387 00									387 00
1876-77	320 00									320 00
1877-78	1,620 00									1,620 00
1878-79	325 00									325 00
1879-80	25,121 46									25,121 46
1880-81	32,028 34									32,028 34
1881-82	58,753 14	2,245 00				40 00				61,038 14
1882-83	90,066 46	22,844 43				880 00		33 91		113,824 80
1883-84	147,983 10	11,370 60		23 00		498 90	14 00	105 00		159,994 60
1884-85	87,474 99	17,089 75		207 25		232 40	329 00	46 98		105,380 37
1885-86	64,820 31	29,562 51	3,131 08	966 05		40 00	257 00	21 78		98,798 73
1886-87	65,111 74	14,242 77	39,487 67	1,429 40	80 00		135 00	6 00		120,492 58
1887-88	94,964 55	5,922 47	23,023 28	2,043 52	80 00	14 00	212 00	4 21		126,264 03
1888-89	90,290 00	2,207 69	16,802 63	3,621 10		39 80	233 90	51 75		113,246 87
1889-90	84,642 95	1,305 57	9,021 63	8,832 06		87 50	186 00	136 52		104,212 23
1890-91	102,902 71	3,079 55	16,193 77	7,809 39		190 39	577 30	51 36	160 00	130,964 47
1891-92	106,461 35	3,726 80	17,222 60	5,077 30		67 70	430 00	41 85		133,027 60
1892-93	105,865 24	6,380 80	11,542 39	5,616 95		374 53	274 65			130,054 56
1893-94	81,290 51	5,740 79	7,687 86	5,562 00		206 24	61 00	413 91		100,962 31
1894-95	74,079 20	5,353 72	8,628 00	5,071 49		23 95	135 00			93,290 46
	1,319,663 10	131,072 45	152,740 91	46,259 51	160 00	2,694 51	2,844 85	913 27	160 00	1,656,508 60

DEPARTMENT OF THE INTERIOR,
TIMBER AND MINES BRANCH,
OTTAWA, 1st November, 1895.

F.

STATEMENT of Receipts on account of Timber, Grazing and Hay on School Lands, for the Fiscal Year 1894–95

MONTH.	Timber Dues.	Grazing Lands	Hay Lands.	Total.	REVENUE CLASSIFIED BY DISTRICTS.				
					Manitoba.	Assiniboia.	Alberta.	Saskatchewan.	Total.
1894.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
July	1 50		231 26	232 76	205 35	27 41			232 76
August	4 50	17 42	359 85	381 77	202 40	113 00	46 82	19 55	381 77
September		25 60	31 35	56 95	28 55	1 80	26 60		56 95
October	6 50		11 40	17 90	17 90				17 90
November	59 00	51 19	5 30	115 49	64 30		51 19		115 49
December	121 25	19 20	10 30	150 75	121 75	9 80	19 20		150 75
1895.									
January	85 25		59 00	144 25	144 25				144 75
February	37 00		32 60	69 60	61 80			7 80	69 60
March	144 15		49 50	193 65	193 65				193 65
April	22 50	25 60	241 10	289 20	200 15	2 50	83 55	3 00	289 20
May	94 50	38 40	402 90	535 80	440 40	9 50	82 90	3 00	535 80
June	41 57	25 73	628 85	696 15	384 67	207 10	97 33	7 05	696 15
	617 72	203 14	2,063 41	2,884 27	2,065 17	371 11	407 59	40 40	2,884 27

DEPARTMENT OF THE INTERIOR,
TIMBER AND MINES BRANCH,
OTTAWA, 1st November, 1895.

G

STATEMENT of Receipts on account of Timber, Grazing, Hay and Stone Quarries on School Lands, commencing with the Fiscal Year 1883-84 and ended the 30th June, 1895.

Fiscal Year.	Timber Dues.	Grazing Lands.	Hay Lands.	Stone Quarries.	Totals.	Revenue classified by Districts.				
						Manitoba.	Assiniboia.	Alberta.	Saskatchewan.	
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1883-84	36 50				36 50	36 50				36 50
1884-85	136 00				136 00	136 00				136 00
1885-86	1,238 11				1,238 11	141 50	1,096 61			1,238 11
1886-87	940 26				940 26	940 26				940 26
1887-88	1,333 99				1,333 99	997 15	336 84			1,333 99
1888-89	695 86				695 86	695 86				695 86
1889-90	919 10			17 50	936 60	936 60				936 60
1890-91	489 22		2,578 72		3,067 94	2,478 39	313 35	195 05	81 15	3,067 94
1891-92	270 81		1,659 41		1,930 22	1,539 17	251 80	99 80	39 45	1,930 22
1892-93	831 50		1,769 45		2,600 95	2,080 85	335 30	135 60	49 20	2,600 95
1893-94	530 13	32 38	2,115 15		2,677 66	1,836 88	447 55	338 48	54 75	2,677 66
1894-95	617 72	203 14	2,063 41		2,884 27	2,065 17	371 11	407 59	40 40	2,884 27
	8,039 20	235 52	10,186 14	17 50	18,478 36	13,884 33	3,152 56	1,176 52	264 95	18,478 36

DEPARTMENT OF THE INTERIOR,
TIMBER AND MINES BRANCH,
OTTAWA, 1st November, 1895.

DEPARTMENT OF THE INTERIOR,
CROWN TIMBER OFFICE,
WINNIPEG, November 26th, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the annual report of this branch of the department covering the period between the the 1st of January and the 31st October, 1895, accompanied by the following tabulated statements, namely:

A. Statement showing the revenue collected from Crown timber.

B. General office returns showing amount of clerical work performed.

C. List of names of licensees conducting operations on government lands within this agency, together with the amount of lumber, etc., manufactured, sold and on hand by each licensee, respectively.

RECEIPTS.

The total receipts from all sources, paid to the credit of the Receiver General on account of revenue, for the ten months covered by this report, amounts to $28,223.30

GENERAL OFFICE WORK.

With each successive year the work of the office expands, new fields of settlement are opened up, and the work of administration extends over a wider area. Increased vigilance has also been exercised in the protection of the government timber in the older settlements, which have now almost solely become dependent on the lands of the Crown for their needed supply. Under the present regulations the settler contributes little or nothing to the support of this branch of the service, while deriving the chief benefit which its protection affords. Upwards of 50,000 cords of wood, supplying fuel for nearly four thousand families, were given away on free permits during last season. In my opinion the country has now reached a stage of development when dues should be collected on all timber cut on Dominion lands, the increasing revenue from which would enable the government to more effectually deal with the question of forest preservation.

LUMBER INTERESTS.

During the year ended the 31st October, 1895, the following quantity of lumber, coming from the directions named, was disposed of in Manitoba and that part of the North-west Territories embraced within my district:—

Canadian pine (from Lake of the Woods)	34,000,000 ft.
do (Fort William)	6,000,000 ft.
Canadian spruce (manufactured in Manitoba)	12,559,083 ft.
United States pine	6,776,518 ft.
British Columbia products (approximately)	10,000,000 ft.
Total	69,335,601 ft.

I am enabled through the kindness of the collector of customs at this port to give you a comparative statement of lumber material imported from the United States and marketed in Manitoba for the years ended 31st of October, 1893, 1894 and 1895, respectively, as follows:—

Oct. 31, 1892, to Oct. 31, 1893.		Oct. 31, 1893, to Oct. 31, 1894.		Oct. 31, 1894, to Oct. 31, 1895.	
Dressed.	Undressed.	Dressed.	Undressed.	Dressed.	Undressed.
180,306 feet.	1,174,747 feet.	647,388 feet.	3,073,195 feet.	1,108,268 feet.	5,668,250 feet.

The importations of lumber from the United States show a gradual increase. The total amount placed on the market is small, however, compared with that of Canadian manufacture. Considering that the bulk of the United States product comes into the country free of duty, and has equal advantages in freights with the Lake of the Woods lumber to this point, the showing in trade clearly indicates that the Canadian millmen are supplying the country with lumber at a price that largely shuts out American competition.

Pine and spruce are selling on the Winnipeg market at the same price as last year at this time, namely, $19.00 and $17.00, respectively.

Trade in the forepart of the season was quiet, but after the grain crop was assured there was an active demand throughout the country. Altogether there was a considerable increase in sales over last year.

FUEL.

There has been a slight reduction from last year in the prices of Anthracite and Bituminous coal, both of native and foreign mining, as will be observed from the following:—

	1894.	1895.
American Anthracite on car at Winnipeg, per ton	$8.25	$8.00
Canadian do (North-west) do do	8.00	8.00
American soft coal on car at do do	7.50	7.00
Canadian do (Galt) do do	7.00	6.00
Canadian do (Souris) do do	3.75	3.75

Souris coal is selling to consumers on cars at Brandon at $3.75 per ton, at Regina, $3.75, at Moose Jaw, $3.50 per ton, and at mines to settlers at $1.40 per ton.

The following information respecting the amount of sales of coal in Manitoba for the ten months ended the 31st October, 1895, has been obtained from a reliable source:—

American Anthracite	17,700 tons.
Canadian do	11,000 do
American Bituminous coal	700 do
Canadian soft coal (Galt), east of Brandon	4,500 do
Canadian soft coal (Souris)	10,300 do

CORD-WOOD.

The sales of cord-wood show a slight increase in amount over last year, approximately 60,000 cords of wood having been sold on the Winnipeg market at prices averaging for tamarac and spruce, $3.50, and poplar, $2.00 per cord, in car lots.

The smaller cities and towns throughout the province were supplied with cord-wood at a less price than that quoted for Winnipeg. Of the 60,000 cords of wood disposed of in Winnipeg, 2,318 cords were brought in from the United States.

Department of the Interior.

FOREST RESERVATIONS.

During the year the work of selecting lands valuable for timber at Turtle Mountain and Moose Mountain, respectively, as timber reservations was completed, the plans and reports of same having been forwarded to the department. Work is proceeding at Riding Mountain with the same object in view, and it is expected that good progress will be made during the present winter towards its accomplishment.

PRAIRIE AND FOREST FIRES.

In no year in the history of the country have prairie fires been so destructive of life and property as in the present, many square miles having been swept over and devastated, and application has been made to the Provincial Government for assistance. This assistance, however, I am credibly informed, the Provincial Government will not give, and has, (wisely, I think,) determined to throw the responsibility on the municipalities, which have been negligent about establishing a fire guardian service. These fires, it is reported, originated chiefly from sparks escaping from locomotives and threshing engines, the latter being the cause of the greater number, and might, in nearly every case, have been avoided had ordinary precautions to prevent them been taken. Carelessness also on the part of the settlers themselves in burning their straw and stubble is responsible for a large number of destructive fires.

The only forest fire of consequence to be reported occurred in the mouth of May last, at Moose Mountain, of which you were furnished particulars in detail. The settlers in the Turtle Mountain district have expressed their appreciation of the services rendered by the department's official, Mr. C. F. Kellar, and his success in keeping fires out of the timber on the mountain. It is stated that it is the first year in a great many that fires have not destroyed more or less timber at this place.

STAFF.

In conclusion I wish to bear testimony to the satisfactory way the work in the office has been performed by the staff under me. In May last Miss Ruttan, who has been with us for two or three years, resigned her position, and the work, so far, has been accomplished without other assistance.

I have the honour to be, sir,

Your obedient servant,

E. F. STEPHENSON,

Crown Timber Agent.

SCHEDULE A.

STATEMENT of Receipts from Crown Timber Agency, Winnipeg, for the 10 months ended 31st October, 1895.

Month.	Bonus.	Ground Rent.	Royalty.	Permits to cut timber on Dominion Lands.	Timber cut on School Lands.	Seizure dues for timber cut on Dominion Lands.	Hay Seizures.		Coal Mine dues	Totals.
							School Lands.	Dominion Lands.		
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January		195 15	315 53	919 16	44 25	80 05		20 40	10 05	1,584 59
February		490 17	286 73	1,121 72	37 00	237 64	3 00			2,176 26
March				2,367 47	144 15	263 50	6 00	15 00		2,796 12
April		302 72	223 60	387 10	2 50	145 15				1,061 07
May			157 97	294 55	76 50	44 90				573 92
June			171 80	2,282 96	41 57	183 25				2,679 58
July			763 87	166 84	1 25	338 27		0 40		1,270 63
August			19 37	552 96	10 00	120 50				702 83
September			1,115 39	1,182 61		245 44		22 50		2,565 94
October		738 59	3,525 55	2,334 37	41 06	846 79				7,486 36
		1,726 63	6,579 81	11,609 74	398 28	2,505 49	9 00	58 30	10 05	22,897 30
Received at Head Office	796 00	4,530 00								5,326 00
Totals	796 00	6,256 63	6,579 81	11,609 74	398 28	2,505 49	9 00	58 30	10 05	28,223 30

WINNIPEG, 31st October, 1895.

E. F. STEPHENSON,
Crown Timber Agent.

SCHEDULE B

Showing number of Saw-Mills in the Province of Manitoba and District of Assiniboia operating under Government Licenses for the Year ending 31st October, 1895.

Name of Owner or Owner and Assignee.	Mill, where situated.	Kind of Power.	Horse Power.	Capacity per 12 hours.	Commenced operations.	Location of Limit.	Description of Timber.	Quantity of lumber manufactured for Year ending 31st October, 1895.	Quantity of lumber sold from amount manufactured in 1895, and on hand 31st October, 1894.	Quantity of lumber on hand 31st October, 1895.	Quantity of shingles manufactured for Year ending 31st October, 1895.	Quantity of shingles sold from amount manufactured in 1895, and on hand 31st October, 1894.	Quantity of shingles on hand 31st October, 1895.	Quantity of laths manufactured for Year ending 31st October, 1895.	Quantity of laths sold from amount manufactured in 1895, and on hand 31st October, 1894.	Quantity of laths on hand 31st October 1895.	Date of last Return.	Number of Returns.	Remarks.
				Ft.				Ft., B. M.	Ft., B. M.	Ft., B. M.	No.	No.	No.				1895.		
John Andrew	Newdale	Steam	16	3,000	1891	Township 19, Range 19 W	Spruce	28,518	55,320		552,000	606,000					June, 30	5	
Chas. Geikie	Dauphin	do	20	5,000	1892	do 23, do 19 W	Spruce and tamarack		33,052		43,045						Sept., 30	4	442 cords slabs sold.
Jno. Watson	do	do	20	5,000	1890	Townships 22 and 23, Range 20 W	do do	425,746	470,238	37,001							June, 30	3	
Isaac Riley	Stonewall	do	25	6,000	1895	Lake Winnipeg	do do	857,900	358,863	499,037	12,000	12,000					Sept., 30	1	
H. B. Mitchell	Selkirk	do	90	30,000	1894	do	do do	978,338	1,339,132	654,437	110,000	118,500					do 30	9	169 cords slabs and 16 railway ties sold.
Wm. Robinson	do	do	30	10,000	1884	do	do do	1,776,994	1,777,724	59,270	800,000		800,000	100,000		100,000	do 30	11	
D. E. Sprague	Winnipeg	do	75	25,000	1882	Rosseau River	Pine	4,000,000	1,311,215	4,354,434				6,000	45,850		do 30	5	103 posts sold.
F. A. Fairchild	do	do	25	6,000	1878	Riding Mountain	Spruce and tamarack		264,570	798,010							do 30	4	
Thomas & Rothwell	Pleasant Home	do	25	6,000	1892	Township 17, Range 3 E.	do do	6,500	11,673								do 30	4	
Jos. T. Thomas								77,800	37,804	39,996	10,000	10,000					do 30	4	
F. L. Engman	Minnedosa	do	18	4,000	1893	do 18, do 17 W	do do	246,000	255,000	31,000	435,000	380,000	55,000				do 30	5	
Drake & Co.	Selkirk	do	16	3,000	1889	Black Island	do do	398,311	335,294	63,017							do 30	6	89 cords slabs sold.
J. A. Christie	Brandon	do	80	35,000	1889	Township 20, Range 21 W., &c.	do do	687,070	687,070								May, 1	1	
J. D. McArthur	Birtle	do	50	20,000	1880	Bird Tail Creek	do do										Sept., 30	1	4,000 railway ties sold.
Peter McArthur	Westbourne	do	35	12,000	1889	Lake Manitoba	do do	1,250,000	1,157,565	1,285,235							do 30	4	
D. McFadyen	Eden	do	16	3,000	1884	Riding Mountain	do do		21,000								June, 30	3	Cancelled.
Hooker & Co.	Selkirk	do	16	3,000	1882	Lake Winnipeg	do do	656,362	618,826	98,517				33,100	36,300		do 30	4	
Friesen, Reimer & Co.	Steinbach	do	35	6,000	1892	Townships 4 and 5, Range 9 E.	do do	267,437	381,978	30,189	441,640	468,500	35,000	13,250	19,250		Sept., 30	6	916 pickets sold.
George Kerr	Franklin	do	16	3,000	1891	Riding Mountain	do do		45,563	20,555							do 30	4	
																	1894.		
H. Roberts	Strathclair	do	30	12,000	1892	do	do do		65,074								Dec., 31	2	Cancelled.
																	1895.		
H. & J. McCorquodale	Wassewa	do	18	4,000	1892	Township 2, Ranges 20 and 21 W	do do	30,624	30,624								March, 31	2	18 loads slabs sold.
T. & J. Shaw	Dauphin	do	75	20,000	1890	do 26, do 19 W.	do do		81,690			94,000					Oct., 16	5	
Jas. Shaw																	Sept., 30	4	
W. H. Atkinson	Deloraine	do	40	12,000	1882	Turtle Mountain	do do	5,260	62,133	46,971							do 30	4	Cancelled.
D. H. Harrison	Neepawa	do	18	4,000	1890	Township 23, Range 18 W.	do do	186,000	32,532	153,468	139,750	78,250	61,500				do 30	3	
Gestur & Mitchell	Icelandic River	do	25	6,000	1893	Lake Winnipeg	do do	731,473	731,473								do 30	4	
David Ross	Whitemouth	do	35	10,000	1881	Whitemouth	do do	535,000	773,604	1,084,860							do 30	8	2,513 cords slabs sold.
Asessippi Mfg. Co	Asessippi	Water	20	5,000	1882	Shell River	do do		119,820	55,180							do 30	4	
W. H. Whimster	Strathclair	Steam	25	6,000	1880	Riding Mountain	do do		268,641	172,460	101,750	101,750					do 30	4	Cancelled.
Jno. Pollock	Yorkton	do	18	4,000	1893	Townships 32, 33, 34, Ranges 3 and 4 W. 2nd Meridian	do do	10,000	35,000								June, 30	3	
Commercial Bank, per F. W. Ferguson, assignee	Winnipeg	do	50	20,000	1880	Bird Tail Creek	do do	563,200	1,196,605	650,000	500,750	405,250	270,000	114,650	34,650	80,000	Sept., 30	4	909½ cords slabs sold; 676 long slabs sold; 2,735 posts; 69,264 ties sold; 56 loads saw-dust.
							Totals	13,718,533	12,559,083	10,176,682	3,102,890	2,274,250	1,221,500	267,000	136,050	180,000		121	

WINNIPEG, 31st October, 1895.

E. F. STEPHENSON, *Crown Timber Agent.*

Department of the Interior.

SCHEDULE C.

GENERAL Office Returns from the 1st January to the 31st October, 1895.

Description of Return.	Number.	Remarks.
Number of letters written	6,024	
do circulars sent	788	
do letters received	5,835	
do circulars received	79	
do permits issued	1,870	
do seizures made	246	
do mill returns received	121	

WINNIPEG, 31st October, 1895.

E. F. STEPHENSON.
Crown Timber Agent.

NEW WESTMINSTER AGENCY,
CROWN TIMBER OFFICE,
NEW WESTMINSTER, 1st November, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa, Ont.

SIR,—I have the honour to submit a report for the first ten months of this year ending 31st October last, in relation to the timber matters within my agency, which embraces all the timber in what is known as the Forty Mile Belt, extended 20 miles on either side of the line of the Canadian Pacific Railway from the Pacific coast to the summit of the Rocky mountains.

For the information of those unacquainted with British Columbia timber I may say that it is to be found in great abundance, composed chiefly of Douglas pine, cedar and spruce; while in less quantities are to be found maple, alder, yew, cypress and cottonwood.

The three first named occasionally grow to a great diameter—from 6 to 9 feet. Cedar of this enormous size is invariably hollow, but sound and clear. The spruce and Douglas pine trees are solid clear through. The spruce is remarkably free from knots, gum, or other defects, and is used extensively in the states of Washington and Oregon for the manufacture of paper. No doubt the Canadian manufacturers of paper stock would establish manufactories on an extensive scale here, but for freight rates being against them, as the actual cost to the railway of hauling such heavy articles as sawn lumber, paper stock, &c., is too great to permit of our competing with eastern manufacturers. The same thing applies to low grade minerals, and also fish, of which we have an abundance, such as salmon, halibut, cod, herrings, sardines, etc., etc.

These heavy, cheap articles will doubtless find their way east in a few years by way of the Nicaragua canal. When that canal is completed we have every reason to look forward to a great development in all branches of our natural products, of which we are blessed with a greater share than any province of the Dominion, or, I might say, Her Majesty's colonies.

The revenue for the past ten months is not equal to the corresponding ten months of last year, not that there has been less lumber manufactured, but for the reason that lumbermen are preserving the timber on Dominion lands, and cutting more extensively from Provincial lands.

The revenue for the ten months ending 31st October, 1895, amounted to $16,642.34 being a decrease as compared with last year of $3,186.68.

Business generally in the province is looking up. Our fertile arable lands are being gradually brought under cultivation.

Fishermen predicted a small run of salmon this season, but were agreeably surprised to find them in enormous quantities, the returns showing that no less than two million dollars' worth were canned. This is attributable to the wise policy of the Fisheries Department in establishing hatcheries, which gives reason to anticipate a steady annual run of this valuable fish, instead of one good year out of four, as formerly.

I must not omit to refer to the development of our gold, silver and cinnabar mines, which are now developed to such an extent as to convince the most experienced mining experts that we have these precious metals in inexhaustible quantities, being computed at no less than hundreds of millions of dollars actual value.

The whole respectfully submitted,
I have the honour to remain,
Your obedient servant,
T. S. HIGGINSON,
Crown Timber Agent.

Department of the Interior.

SCHEDULE A.

STATEMENT of Receipts on account of Crown Timber for the 10 months ended on the 31st October, 1895.

Month.	Bonus.	Ground Rent.	Royalty on Return of Sales.	Permit Fees and Dues.	Miscellaneous.	Totals Collected at New Westminster.	Totals Collected at Head Office.
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January		13 14	1,810 42	9 00		1,832 56	755 52
February		88 96	571 49			660 45	
March		6 99	500 05			507 04	91 03
April							
May		146 49	792 18			938 67	308 94
June		952 04	4,508 17			5,460 21	848 22
July		1,072 76	1,096 22			2,168 98	20 00
August			221 23	38 98		260 21	94 75
September			139 74	137 31		277 05	341 50
October		10 46	713 23			723 69	414 85
Totals, New Westminster		2,437 33	11,144 91	185 29		13,767 53	
" Head Office	263 74	2,589 25			21 82	2,874 81	
Totals	263 74	5,026 58	11,144 91	185 29	21 82	16,642 34	

CROWN TIMBER OFFICE,
NEW WESTMINSTER, 1st November, 1895.

T. S. HIGGINSON,
Crown Timber Agent.

SCHEDULE B.

SHOWING the Saw-mills in the Railway Belt in the Province of British Columbia, operating under Government License for the Year ending 31st October, 1895.

Name of Mill-Owner.	Where Mill is situated.	Kind of Power.	Capacity per 12 hours.	Lumber.		Shingles.		Laths.		Last Mill return received.
				Manufactured.	Sold.	Manufactured.	Sold.	Manufactured.	Sold.	
			Feet.	Ft., B.M.	Ft., B.M.					
Brunette Saw-mill Co	New Westminster	Steam	100,000	1,132,676	1,132,676					31st March, 1895
Columbia River Lumber Co	Beaver	do	75,000	1,316,348	1,316,348					30th June, 1895
Genelle Bros	Tappen	do	25,000	2,798,664	2,798,664					30th September, 1895
Golden Lumber Co	Golden			1,174,866	1,174,866					do
Grant & Kerr	Ladner's Landing	Steam	15,000	703,049	703,049					30th June, 1895
Kendall, H. H						1,300,000	850,000			do
*Royal City Planing Mills	New Westminster	Steam	100,000	1,552,469	1,552,469					31st March, 1895
Reilly, Isaac R. & Thomas S				143,447	143,447					do
Revelstoke Lumber Co	Revelstoke	Steam	15,000	611,668	611,668	480,000	480,000	5,900	5,900	30th September, 1895
Shuswap Milling Co	Kamloops	do	20,000	145,000	145,000					30th June, 1895
Wells, W. C	Palliser	do	25,000	463,900	441,525					do
Totals				10,042,087	10,019,712	1,780,000	1,330,000	5,900	5,900	

* British Columbia Mills Timber and Trading Co., a branch of the Royal City Planing Mills Co.

EDMONTON AGENCY.

CROWN TIMBER OFFICE, EDMONTON, 16th November, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to inclose the following statements for the ten months ending the 31st October, 1895. :—

Schedule "A," statement of receipts on account of Crown timber.

Schedule "B," statement showing the saw-mills within my agency operating under Government license during the year.

I have the honour to be, sir,
Your obedient servant,

R. A. RUTTAN,
Crown Timber Agent.

SCHEDULE A.

STATEMENT of Receipts on account of Crown Timber for the ten months ended the 31st October, 1895.

Month.	Bonus.	Ground Rent.	Royalty on Sales.	Permit Fees and Dues.	Seizures, Dues and Fines for Trespass.	Totals.	Amounts collected at Head Office.
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January		21 25		73 34		94 59	41 20
February		320 81		350 25		671 06	69 50
March		22 49		156 59	40 00	219 08	24 53
April		8 83	117 97	168 12	6 00	300 92	311 00
May				13 50	77 37	90 87	270 50
June			119 39	92 05		211 44	
July			90 00	18 47		108 47	
August				1 50		1 50	
September				1 50	75 00	76 50	
October			562 50	18 00	281 00	861 50	
Totals—Edmonton		373 38	889 86	893 32	479 37	2,635 93	
" —Head Office	395 50	321 23				716 73	
Totals	395 50	694 61	889 86	893 32	479 37	3,352 66	

R. A. RUTTAN,
Crown Timber Agent.

CROWN TIMBER OFFICE,
EDMONTON, 16th November, 1895.

SCHEDULE B.

SHOWING the Saw-Mills in the Edmonton Crown Timber Agency under Government License, during the year ending 31st October, 1895.

Name of Owner or Owner and Assignee.	Where situated.	Kind of Power.	Horse Power.	Commenced operations in.	Description of Timber.	Logs cut at.	Quantity of Lumber manufactured, 12 months ending 31st October, 1895	Quantity of Lumber sold, on hand 31st October, 1894, and manufactured to 31st October, 1895.	Date of last mill return forwarded to Head Office.	Remarks.
Moore & McDowall.....	White Mud.....	Steam..	40	1895	Spruce..	Limit No. 496 North Saskatchewan.	47,333	151,985 sold	30 Sept., 1895.	This mill was burned down in 1894.
Walter & Humberston....	South Edmonton..	do....	60	1895	do. .	Limit No. 653 North Saskatchewan.	810,412	313,326 do	30 Sept., 1895.	No business done in 1894.
Otterwell & Co.....	Beaver Hills.....	do....	16	1895	do....	Limits Nos. 673 674 Beaver Hills.	93,997	73,997 do	30 Sept., 1895.	do do
T. R. Haddon	Sturgeon River...	do....	16	1894	do....	Limit No. 623 Sturgeon River.	227,386	225,905 do	30 June, 1895.	Not now in business.
Lamoureux Bros., transferred to Chassé & Hêtu.	Stoney Plain.....	do....	16	1894	do....	Limit No. 542 Stoney Plain.	1,039,243	1,212,122 do	30 Sept., 1895.	
Wm. Short.....	do	do....	16	1884	do....	Limit No. 645 Stoney Plain.	496,709	109,690 do	30 Sept., 1895.	
A. J. Frazer & Co.... ..	South Edmonton..	do....	20	1894	do....	Limit No. 646.....	331,549	149,767 do	30 Sept., 1895.	
D. R. Fraser & Co..	Edmonton.....	do....	30	1880	do....	Limit No. 627.....	322,925	404,295 do	30 Sept., 1895.	
							3,399,554	2,641,087 do		

MEMO.—31 mill returns received during the year.

R. A. RUTTAN,
Crown Timber Agent.

CALGARY AGENCY.

CROWN TIMBER OFFICE, CALGARY, 16th November, 1895.

A. M. BURGESS, Esq,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to inclose the following statements for the ten months ending the 31st October, 1895 :—

Schedule "A," statement of receipts on account of Crown timber.

Schedule "B," general office return.

Schedule "C," statement showing the saw-mills in the Calgary Crown timber agency operating under government licenses during the year.

I have the honour to be, sir,
Your obedient servant,
AMOS ROWE,
Crown Timber Agent.

SCHEDULE A.

STATEMENT of Receipts on account of Crown Timber for the ten months ended the 31st October, 1895.

Month.	Bonus.	Ground Rent.	Royalty on Returns.	Permits Dominion Lands.	Seizures, Dues and Fines for Trespass.	Total Collected at Calgary.	Total Collected at Head Office.
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January		682 43	145 43	49 50		877 36	278 01
February			92 64	8 75		101 39	277 81
March				21 50		21 50	
April			363 56	75		364 31	136 85
May			22 44	29 75		52 19	715 23
June			559 43	26 22		585 65	652 72
July		21 27	195 08	135 75	77 50	429 60	480 72
August			199 47	1 50		200 97	302 35
September			22 03	75		22 78	70 00
October			83 24	190 25		273 49	203 17
Totals at Calgary		703 70	1,683 32	463 47	77 50	2,929 24	
" at Head Office	25 00	2,051 33	1,040 53			3,116 86	
	25 00	2,755 03	2,723 85	463 47	77 50	6,046 10	

Revenue from School lands collected at Head Office during April, 1895..... $ 15 00
Revenue from Dominion lands, collected during the 10 months as shown above. 6,046 10

Grand total $6,061 10

AMOS ROWE,
Crown Timber Agent.

CROWN TIMBER OFFICE,
CALGARY, 16th November, 1895.

SCHEDULE B.

GENERAL Office Return for the 10 months ended 31st October, 1895.

Description of Return.	Number.	Compared with 12 months last year.		Remarks.
		Increase.	Decrease.	
Number of letters written	1,446	.....	612	Including Dominion lands.
do received	1,581	.....	1,700	do do
Number of free permits issued	194	.....	341	
do permits issued subject to dues	13	.....	2	
do mill returns received and verified	18	.....	16	

AMOS ROWE,
Crown Timber Agent.

SCHEDULE C.

Showing the Saw-Mills in the Calgary Crown Timber Agency operating under Government License, during the Year ended the 31st October, 1895.

	Name of Owner or Owner and Assignee.	Where Situated.	Kind of Power.	Horse-Power.	Commenced Operations in	Description of Timber.	Logs cut at
1	Alberta Lumber Company	Red Deer River	Steam	125	June, 1890	Spruce and Fir	Red Deer River
2	Eau Claire and Bow River Lumber Co.	Calgary	do	65 used, can work to 175	1887	Fir, Spruce and Cypress Pine.	Kananaskis River
3	Major James Walker	Kananaskis	do	60	1883	Spruce and Fir	do
4	Hon. Peter McLaren	Mountain Mills, Mill Creek	Water	20	1882	do	Mill Creek
5	Hon. Peter McLaren	McLeod	Burned, 5th Aug., '94.		1888	do	Old Man's River
6	Charles O. Card	Cardston	Steam	25	1891	do	St. Mary's River
7	John Lineham	Dewdney	do	50	1890	do	Sheep Creek
8	A. W. Gillingham	North Fork, Old Man's River	do	25	1894	do	Old Man's River

SCHEDULE C.—Showing the Saw-Mills in the Calgary Crown Timber Agency, &c.—*Concluded.*

	Quantity of lumber Manufactured during the year ended 31st Oct., 1895.	Quantity on hand 31st October, 1894, sold and manufactured to 31st October, 1895.	Quantity of shingles manufactured during year ended 31st Oct., 1895.	Quantity on hand, sold and manufactured to 31st October, 1895.	Quantity of laths manufactured during year ended 31st October, 1895.	Quantity on hand, sold and manufactured to 31st Oct., 1895.	Date of last Return.
	Ft.	Ft.					
1	.....	On hand 64,376	.....	.....	.....	.....	30th June, 1895.
		Sold 64,380					
		Manufactured.....					
2	990,558	On hand 2,826,226	.....	.....	.....	On hand 213,675	
		Sold 968,663			80,500	Sold 179,900	
		Manufactured 990,558				Manufactured 80,500	May, 1894.
3	.....	On hand 827,334	.....	.....	.....	On hand 700	
		Sold 301,433				Sold 700	30th June, 1895.
		Manufactured.....				Manufactured.....	
4	149,153	On hand 278,167	.....	.....	.....	.....	
		Sold 152,320				.....	30th September, 1895.
		Manufactured 149,153	.....	.....	.....	.....	
5	.....	On hand 345,439	.....	.....	.....	On hand 52,200	
		Sold 167,890				Sold 39,700	do
		Manufactured.....				.....	
6	150,000	On hand 135,000	.....	On hand 267,200	.....	.....	
		Sold 168,000	52,000	Sold 13[illegible],700	.....	.....	30th June, 1895.
		Manufactured 150,000	.....	Manufact'ed 52,000	.....	.....	
7	395,916	On hand, 31st Dec., 1894. 353,535	.....	On hand 31st Dec., 1894. 69,800	.....	On hand, 31st Dec., 1894- 36,608	
		Sold 434,451	28,000	Sold 28,000	8,100	Sold 8,200	
		Manufactured 395,916	.....	Manufact'ed 28,000	.....	Manufactured 8,100	do
8	.....	On hand, 30th Sept., 1894. 198,374	.....	.....	.....	.....	
		Sold 72,231	.....	.....	.....	.....	
		Manufactured.....	.....	.....	.....	.....	do
	1,685,627		80,000		88,600		

AMOS ROWE,
Crown Timber Agent.

PRINCE ALBERT AGENCY.
CROWN TIMBER OFFICE,
PRINCE ALBERT, November 13th, 1895.

A. M. BURGESS, Esq.,
Deputy of the Minister of the Interior,
Ottawa.

SIR,—I have the honour to inclose the following statements for the ten months ended the 31st October, 1895.

Schedule "A" statement of receipts on account of Crown timber dues.

Schedule "B" statement showing the saw-mills operating under Government license during the year.

Schedule "C" statement showing general official work during the year.

I have the honour to be, sir,
Your obedient servant,
JNO. McTAGGART,
Crown Timber Agent.

SCHEDULE A.

STATEMENT of Receipts on account of Crown Timber for the ten months ended 31st October, 1895.

Month.	Bonus.	Ground Rent.	Royalty on Returns.	Permit Fees and Dues.	Seizures, Dues and Fines for Trespass.	Total.	Amounts collected at Head Office.
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January				227 43		227 43	757 92
February				622 56		622 56	
March				195 33		195 33	
April			1,291 24	181 76	10 32	1,483 32	30 00
May				125 23	21 62	146 85	105 00
June				61 08	20 05	81 13	100 41
July				77 18	40 60	117 78	
August				31 35	10 00	41 35	10 00
September				47 75	5 00	52 75	
October		50 60	454 99	38 55		544 14	
Totals at Prince Albert		50 60	1,746 23	1,608 22	107 59	3,512 64	
do Head Office	40 00	963 33				1,003 33	
Totals	40 00	1,013 93	1,746 23	1,608 22	107 59	4,515 97	

JNO. McTAGGART,
Crown Timber Agent.

CROWN TIMBER OFFICE,
PRINCE ALBERT, 13th November, 1895.

SCHEDULE B.

SHOWING the Saw-Mills in Prince Albert Agency operating under Government license during the year ending the 31st October, 1895.

Name of Owner.	Kind of Power.	Horse Power.	Capacity per 12 hours.	Commenced operations.	Description of Timber.	Logs, where cut.	Quantity manufactured during the year.	Quantity of Lumber sold during the year.	Quantity of Shingles manufactured during the year.	Quantity of Shingles sold during the year.	Quantity of Laths manufactured.	Quantity of Laths sold.	Date of last return.
									M.	M.	M.	M.	
Moore & Macdowall.	Steam.	75	35,000	1876	Spruce, pine, tamarack and poplar.	On limits north of North Saskatche'n River.	726,654	2,282,414	34	457	379	278	30 September, 1895.
James Sanderson....		50	15,000	1890			438,036	222,805	284	232	.....	.....	do do
Daniel L. Shannon..		45	15,000	1890			....	83,960	36	36	8	8	do do
							1,164,690	2,589,179	354	725	387	286	

CROWN TIMBER OFFICE,
PRINCE ALBERT, 13th November, 1895.

JNO. McTAGGART,
Crown Timber Agent.

Department of the Interior.

SCHEDULE C.

GENERAL office return for the year ended the 31st October, 1895.

Description of Work.	Number.
Permits issued at Prince Albert	232
" " Battleford	49
Seizures made at Prince Albert	7
" " Battleford	14
Mill returns received	12

JNO. McTAGGART,
Crown Timber Agent.

CROWN TIMBER OFFICE,
PRINCE ALBERT, 13th November, 1895.

No. 5.

DEPARTMENT OF THE INTERIOR, ACCOUNTANT'S BRANCH.
OTTAWA, 29th November, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior, Ottawa.

SIR,—I have the honour to submit the following report referring to the accounts of this Department:—

Two distinct sets of statements have been prepared, one set covering the 12 months ended on the 31st of October last, marked A, B, C, D, E, F, G and H, and showing under the usual headings the revenue of the Department for that period; the second set marked A1, B1, C1, D1, E1, F1, G1 and H1, showing the revenue for the 10 months ended on the same date.

EXPENDITURE.

As in the case of the last yearly report, no statement of expenditure has been prepared in connection with this report, as it would only duplicate work. Monthly statements are rendered to the Auditor General, and details thereof appear in that officer's annual report.

REVENUE.

The details of the revenue received are sent to the Finance Department every week, and monthly statements are rendered to the Auditor General, so that all particulars are fully given with respect to every item of revenue.

Eight statements hereto attached, marked A, B, C, D, E, F, G and H, show the revenue under general headings during the old departmental year ended on the 31st of October last, as follows:—

"A," the revenue received from the several agencies of the outside service, and at headquarters in Ottawa, on account of Dominion lands to be: cash, $164,762.22; warrants and scrip, $39,156.07; total, $203,918,29.

"B," the revenue from Ordnance lands, month by month, a total in cash of $22,158.50.

"C," the revenue from School lands from each of the school districts in Manitoba and the North-west Territories, amounting to $46,814.77.

"D," the revenue from registration fees from each of the registration districts in the North-west Territories, amounting to $11,423.78.

"E," the revenue from fines and forfeitures in the North-west Territories, amounting to $676.00.

"F," the receipts on account of casual revenue, amounting to $3,076.21.

"G," seed grain and relief mortgage repayments, amounting to $3,664.99.

"H," the revenue received on account of Dominion lands during the year in question. This is shown month by month under each sub-head. The total amount received is, in cash, $164,762.22; and in warrants and scrip, $39,156.07; total $203,918.29.

Eight statements also hereto attached, marked A1, B1, C1, D1, E1, F1, G1 and H1, show the revenue under general headings during the ten months ended on the 31st ultimo:

"A1," shows the revenue received from the several agencies of the outside service, and at headquarters in Ottawa on account of Dominion lands to be: cash, $133, 560.45; warrants and scrip, $33,588.99; total, $167,149.44.

"B1," shows the revenue from Ordnance lands, month by month, a total in cash of $18,522.98.

"C1," shows the revenue from School lands from each of the school districts in Manitoba and the North-west Territories, amounting to $39,643.77.

"D1," shows the revenue from registration fees from each of the registration districts in the North-west Territories, amounting to $8,789.51.

"E1," shows the revenue from fines and forfeitures in the North-west Territories, amounting to $676.00

"F1," shows the receipts on account of casual revenue, amounting to $2,557.32.

"G1," shows seed grain and relief mortgage re-payments, amounting to $2,813.83.

"H1," shows the revenue received on account of Dominion lands during the ten months in question; it is shown month by month under each sub-head. The total amount received is, in cash, $133,560.45; and in warrants and scrip, $33,588.99; total, $167,149.44.

Respectfully submitted,

J. A. PINARD,

Accountant.

A[1]

STATEMENT of Receipts on account of Dominion Lands for ten months commencing 1st January, 1895, and ending 31st October, 1895.

——	Cash.	Scrip and Warrants.	Total.
	$ cts.	$ cts.	$ cts.
Dominion Lands Agencies—			
Battleford	110 78		110 78
Beaver Lake	590 00		590 00
Calgary	2,173 02	3,273 51	5,446 53
Coteau	780 47		780 47
Edmonton	2,378 31	5,355 99	7,734 30
Kamloops	7,307 62		7,307 62
Lethbridge	3,937 54	4,799 65	8,737 19
Little Saskatchewan	6,399 32	1,120 00	7,519 32
New Westminster	6,212 14	2,305 21	8,517 35
Prince Albert	1,070 92	1,092 71	2,163 63
Qu'Appelle	5,785 63	983 15	6,768 78
Red Deer	2,603 59	500 00	3,103 59
Souris	4,394 63	2,432 59	6,827 22
Swift Current	150 00		150 00
Touchwood	1,340 93	1,060 00	2,400 93
Wetaskiwin	3,391 11	1,722 41	5,113 52
Winnipeg	5,742 53	5,895 77	11,638 30
Crown Timber Agencies—			
Winnipeg	27,683 67		27,683 67
Edmonton	3,353 16		3,353 16
Prince Albert	4,598 91		4,598 91
Calgary	6,046 10		6,046 10
New Westminster	16,201 82		16,201 82
Rocky Mountains Park of Canada	1,869 65		1,869 65
Grazing Lands	2,701 58	3,048 00	5,749 58
Hay Permits	5,526 51		5,526 51
Mining Fees	97 00		97 00
Coal Lands	46 20		46 20
Map Sales, Office Fees, &c	475 30		475 30
Survey Fees	7,133 29		7,133 29
Surveyors' Examination Fees	20 00		20 00
Fees, re applications for Patents, &c	3,157 00		3,157 00
Settlers' Deposits	89 82		89 82
Suspense Account	121 90		121 90
Foreshore Fees	40 00		40 00
Refunds of Overpayments	10 00		10 00
Refunds of Scrip Taken	10 00		10 00
Rentals	10 00		10 00
	133,560 45	33,588 99	167,149 44

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANTS BRANCH,
OTTAWA, 29th November, 1895.

Department of the Interior.

B[1]

STATEMENT of Receipts on account of Ordnance Lands for 10 months commencing 1st January, 1895, and ending 31st October, 1895.

Month.	Amount.	Total.
1895.	$ cts.	$ cts.
January	681 10	
February	2,564 02	
March	659 91	
April	2,727 46	
May	526 94	
June	1,755 50	
July	1,355 84	
August	1,386 67	
September	4,084 07	
October	2,781 47	
		18,522 98

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

C[1]

STATEMENT of Receipts on account of School Lands for 10 months commencing 1st January, 1895, and ending 31st October, 1895.

School District.	Amount.	Total.
	$ cts.	$ cts.
Manitoba	38,540 07	
Assiniboia	580 12	
Alberta	454 03	
Saskatchewan	69 55	
		39,643

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

D[1]

STATEMENT of Fees received from Registrars in the North-west Territories for ten months commencing 1st January, 1895, and ending 31st October, 1895.

Registration Districts.	Amount.	Total.
	$ cts.	$ cts.
Assiniboia	3,864 39	
North Alberta	1,984 06	
South Alberta	2,189 67	
East Saskatchewan	683 22	
West Saskatchewan	68 17	
		8,789 51

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

E[1]

STATEMENT of Receipts on Account of Fines and Forfeitures in the North-west Territories, for ten months commencing 1st January, 1895, and ending 31st October, 1895.

Date.	Through whom paid.	Amount.	Total.
1895.		$ cts.	$ cts.
Feb., 4	His Honour the Lieut.-Governor of the North-west Territories	261 50	
Apl. 2	do do do	73 50	
do 9	do do do	145 50	
May 7	do do do	72 00	
Aug. 12	do do do	123 50	
			676 00

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895,

Department of the Interior.

F[1]

STATEMENT of Casual Revenue for 10 months commencing 1st January, 1895, and ending 31st October, 1895.

Name.	Particulars.	Amount.
		$ cts.
W. H. Stevenson	Account purchase, old land office, Regina	64 80
A. C. Talbot	Sale of tent, $4, canoe, $11	15 00
A. Ferguson	Liquor permit	250 00
P. B. Ware	do	250 00
"Gazette" Publishing Co.	Refund of immigration check 5128, 7th July, 1893	15 00
W. F. King	Sale of boat, &c	123 75
Land Commissioner, Wpg.	Sale of Inspector Cox's horse	20 55
Lieut.-Governor, N.W.T.	Overpayment to the Regina Electric Light Co	18 00
Land Commissioner, Wpg	Repayments, seed grain advances, 1894	977 63
do do	do grasshopper relief mortgages, 1876	822 59
		2,557 32

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

G[1].

STATEMENT showing Seed Grain and Relief Mortgage Repayments for ten months commencing 1st January, 1895, and ending 31st October, 1895.

Relief Mortgages, 1876.	Seed Grain Advances, 1886-87-88.	Seed Grain Advances, 1890.	Seed Grain Advances, 1894.	Seed Grain Advances, 1895.	Total.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
822 59	393 56	290 01	977 63	330 04	2,813 83

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

H[1].

STATEMENT of Receipts on account of Dominion Lands for 10 months commencing 1st January, 1895, and ending 31st October, 1895.

MONTH.	Homestead Fees.	Inspection Fees.	Improvements.	General Sales of Lands.	Timber Dues.	Rents from Grazing Lands.	Hay Permits, Mining Fees and Coal Lands.	Fees *re* applications for Patents, &c.	Surveyors' Examination Fees.	Rocky Mountains Park of Canada.	Map Sales, Office Fees, &c	Survey Fees.	Miscellaneous.	Total.
1895.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
January	1,424 00	200 00	153 50	4,006 71	7,727 60	123 48	99 30	460 00	.....	90 92	56 16	32 00	1 00	14,374 67
February	1,262 00	130 00	455 00	3,085 30	4,575 87	109 62	24 45	230 00	20 00	120 43	37 52	149 13	10 00	10,209 32
March	1,970 00	160 00	289 00	2,400 90	3,703 95	731 97	36 50	205 00	.....	1 00	46 80	.....	24 52	9,569 64
April	2,998 00	180 00	467 00	4,464 42	3,757 46	108 42	430 55	210 00	.....	13 75	30 55	4,527 71	29 52	17,217 38
May	3,152 00	120 00	293 25	2,762 58	7,592 05	116 46	724 15	332 00	.....	33 00	85 70	16 10	57 25	15,284 54
June	3,711 00	140 00	194 50	2,518 95	10,692 69	254 79	1,487 75	350 00	.....	371 15	111 40	32 00	104 00	19,968 23
July	2,236 00	120 00	178 25	2,845 98	3,249 25	433 92	1,607 87	375 00	.....	712 27	4 75	2,055 21	.....	13,818 50
August	1,638 00	190 00	296 50	3,097 61	3,111 29	246 66	791 43	400 00	.....	290 95	80 46	175 61	10 00	10,328 51
September	1,088 00	70 00	160 00	1,270 79	3,426 72	427 81	268 41	300 00	.....	160 43	32 36	31 88	25 00	7,261 40
October	1,356 00	100 00	302 25	2,642 05	10,046 78	148 45	199 30	405 00	.....	75 75	40 60	113 65	98 43	15,528 26
	20,835 00	1,410 00	2,789 25	29,095 29	57,883 66	2,701 58	5,669 71	3,267 00	20 00	1,869 65	526 30	7,133 29	359 72	133,560 45
Scrip and warrants	.....	.....	.....	30,540 99	.....	3,048 00	.....	.....	.....	.....	.....	.....	.....	33,588 99
	20,835 00	1,410 00	2,789 25	59,636 28	57,883 66	5,749 58	5,669 71	3,267 00	20 00	1,869 65	526 30	7,133 29	359 72	167,149 44

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

Department of the Interior.

A.

STATEMENT of Receipts on account of Dominion Lands for the year commencing 1st November, 1894, and ending 31st October, 1895.

——	Cash.	Scrip and Warrants.	Total.
	$ cts.	$ cts.	$ cts.
Dominion Land Agencies—			
Battleford	120 78		120 78
Beaver Lake	968 00		968 00
Calgary	2,563 58	4,227 28	6,790 86
Coteau	840 60		840 60
Edmonton	3,013 81	6,075 99	9,089 80
Kamloops	10,192 39		10,192 39
Lethbridge	4,818 54	4,799 65	9,618 19
Little Saskatchewan	7,685 29	1,320 00	9,005 29
New Westminster	8,524 34	2,900 21	11,424 55
Prince Albert	1,225 52	1,242 71	2,468 23
Qu'Appelle	6,663 20	1,823 15	8,486 35
Red Deer	3,278 33	998 00	4,276 33
Souris	5,494 23	3,132 59	8,626 82
Swift Current	282 03		282 03
Touchwood	1,622 93	1,060 00	2,682 93
Wetaskiwin	4,108 11	1,722 41	5,830 52
Winnipeg	7,327 33	6,726 08	14,053 41
Crown Timber Agencies—			
Winnipeg	34,252 13		34,252 13
Edmonton	4,189 56		4,189 56
Prince Albert	5,339 69		5,339 69
Calgary	7,799 90		7,799 90
New Westminster	19,142 52		19,142 52
Rocky Mountains Park of Canada	2,246 09		2,246 09
Grazing Lands	4,636 94	3,128 00	7,764 94
Hay permits	5,883 70		5,883 70
Mining fees	182 00		182 00
Coal lands	46 20		46 20
Map sales, office fees, &c	543 59		543 59
Survey fees	7,276 92		7,276 92
Surveyors' examination fees	20 00		20 00
Fees, *re* application for patents, etc	4,182 25		4,182 25
Settlers' deposits	89 82		89 82
Suspense account	121 90		121 90
Foreshore fees	39 00		39 00
Refunds of overpayments	20 00		20 00
Rentals	11 00		11 00
Refunds of scrip taken	10 00		10 00
Total	164,762 22	39,156 07	203,918 29

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

B.

STATEMENT of Receipts on account of Ordnance Lands for the year commencing 1st November, 1894, and ending 31st October, 1895.

Month.	Amount.	Total.
1894.	$ cts.	$ cts.
November	2,058 99	
December	1,576 53	
1895.		
January	681 10	
February	2,564 02	
March	659 91	
April	2,727 46	
May	526 94	
June	1,755 50	
July	1,355 84	
August	1,386 67	
September	4,084 07	
October	2,781 47	
		22,158 50

J. A. PINARD.
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

C.

STATEMENT of Receipts on account of School Lands for the year commencing 1st November, 1894, and ending 31st October, 1895.

School District.	Amount.	Total.
	$ cts.	$ cts.
Manitoba	45,630 88	
Assiniboia	589 92	
Alberta	524 42	
Saskatchewan	69 55	
		46,814 7

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

Department of the Interior.

D.

STATEMENT of Fees received from Registrars in the North-west Territories, for the year commencing 1st November, 1894, and ending 31st October, 1895.

Registration Districts.	Amount.	Total.
	$ cts.	$ cts.
Assiniboia	4,765 25	
North Alberta	2,602 36	
South Alberta	3,157 67	
East Saskatchewan	818 37	
West Saskatchewan	80 13	
		11,423 78

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

E.

STATEMENT of receipts on account of Fines and Forfeitures in the North-west Territories, for the Year commencing 1st Nov., 1894, and ending 31st Oct., 1895.

Date.	Through whom paid.	Amount.	Total.
1895.		$ cts.	$ cts.
February 4....	His Honour the Lieut.-Governor of the N.W. Territories.	261 50	
April 2....	do do ..	73 50	
do 9....	do do ..	145 50	
May 7 ...	do do ..	72 00	
August 12....	do do ..	123 50	
			676 00

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

F

STATEMENT of Casual Revenue for the year commencing 1st November, 1894, and ending 31st October, 1895.

Name.	Particulars.	Amount.
		$ cts.
Joseph Wolf	Sale of Inspector Aikman's horse	53 00
Manitoba Government	Overcharge on voucher 56, July, 1893	10 00
W. F. King	Balance account travelling expenses	27 18
Frank Clayton	do do do	25
Wm. Pearce	Sale of old office stove and pipe	12 00
A. P. Sherwood	Balance account travelling expenses,	21 49
W. H. Stevenson	Account purchase old land office, Regina	64 80
A. C. Talbot	Sale of tent, $4, one canoe, $11	15 00
A. Ferguson	Liquor permit	250 00
P. B. Ware	do	250 00
Gazette Publishing Co	Refund of Immigration cheque 5128, 7th July, 1893	15 00
W. F. King	Sale of boat, &c	123 75
Land Commis'nr, Winnipeg	Sale of Inspector Cox's horse	20 55
Lieut.-Governor N. W. T.	Overpayment to the Regina Electric Light Company	18 00
Land Commis'nr, Winnipeg	Repayments, seed grain advances, 1894	1,372 60
do do do	do Grasshopper relief mortgages, 1876	822 59
	Total	3,076 21

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

G

STATEMENT showing Seed Grain and Relief Mortgage Repayments for the year commencing 1st November, 1894, and ending 31st October, 1895.

Relief Mortgages. 1876.	Seed Grain advances 1886-7-8.	Seed Grain advances 1890.	Seed Grain advances. 1894.	Seed Grain advances 1895.	Total.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
822 59	714 60	425 16	1,372 60	330 04	3,664 99

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

H.

STATEMENT of Receipts on account of Dominion Lands for the year commencing 1st November, 1894 and ending 31st October, 1895.

MONTH.	Homestead Fees.	Inspection Fees.	Improvements.	General Sales of Lands.	Timber Dues.	Rents from Grazing Lands.	Hay Permits, Mining Fees and Coal Lands.	Fees *re* applications for Patents, &c.	Surveyors' Examination Fees.	Rocky Mountains Park of Canada.	Map Sales, Office Fees, &c.	Survey Fees.	Miscellaneous.	Total.
1894.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
November	2,738 00	210 00	386 60	4,571 65	5,314 44	1,207 32	63 27	635 00	.....	203 00	40 07	16 00	10 00	15,395 35
December	2,297 00	180 00	318 80	3,516 67	7,525 70	728 04	378 92	420 25	.....	173 44	33 97	227 63	6 00	15,806 42
1895.														
January	1,424 00	200 00	153 50	4,006 71	7,727 60	123 48	99 30	460 00	...	90 92	56 16	32 00	1 00	14,374 67
February	1,262 00	130 00	455 00	3,085 30	4,575 87	109 62	24 45	230 00	20 00	120 43	37 52	149 13	10 00	10,209 32
March	1,970 00	160 00	289 00	2,400 90	3,703 95	731 97	36 50	205 00	.....	1 00	46 80	.....	24 52	9,569 64
April	2,998 00	180 00	467 00	4,464 42	3,757 46	108 42	430 55	210 00	.....	13 75	30 55	4,527 71	29 52	17,217 38
May	3,152 00	120 00	293 25	2,762 58	7,592 05	116 46	724 15	332 00	.....	33 00	85 70	16 10	57 25	15,284 54
June	3,711 00	140 00	194 50	2,518 95	10,692 69	254 79	1,487 75	350 00	.....	371 15	111 40	32 00	104 00	19,968 23
July	2,236 00	120 00	178 25	2,845 98	3,249 25	433 92	1,607 87	375 00	.....	712 27	4 75	2,055 21	.....	13,818 50
August	1,638 00	190 00	296 50	3,097 61	3,111 29	246 66	791 43	400 00	.....	290 95	80 46	175 61	10 00	10,328 51
September	1,088 00	70 00	160 00	1,270 79	3,426 72	427 81	268 41	300 00	.....	160 43	32 36	31 88	25 00	7,261 40
October	1,356 00	100 00	302 25	2,642 05	10,046 78	148 45	199 30	405 00	.....	75 75	40 60	113 65	98 43	15,528 26
	25,870 00	1,800 00	3,494 65	37,183 61	70,723 80	4,636 94	6,111 90	4,322 25	20 00	2,246 09	600 34	7,376 92	375 72	164,762 22
Scrip and warrants	.....	.....	.....	36,028 07	.....	3,128 00	.....	.....	.....	.....	.....	.....	.....	39,156 07
	25,870 00	1,800 00	3,494 65	73,211 68	70,723 80	7,764 94	6,111 90	4,322 25	20 00	2,246 09	600 34	7,376 92	375 72	203,918 29

J. A. PINARD,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTANT'S BRANCH,
OTTAWA, 29th November, 1895.

No. 6.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, November 15, 1895.

A. M. BURGESS, Esq.
Deputy Minister of the Interior,

SIR,—I have the honour to submit a report on the transactions of this branch for the ten months ended 31st October, 1895.

The statements annexed are: (A.) Statement of sales, including lots redeemed.

At Ottawa 12½ lots forming part of the lands acquired from Hugh Fraser by the Earl of Dalhousie, and now known as Lower Town, were converted from leasehold into freehold by the payment of $2,426.33.

The debentures issued by the municipality of the town of Windsor in 1858 and accepted by the government in payment of 4.48 acres of the Ordnance Reserve in that town, have been redeemed. Negotiations with the corporation in reference to the form of grant to be issued are now pending. As soon as a settlement is effected letters patent will be prepared for the land in question. This will close a long standing account.

Three water lots on the St. Lawrence river at Sorel—which realized the sum of $30.00—were the only sales made since the preparation of the last report. Notwithstanding the small amount from this source, the revenue collected exceeds that for the same period of 1894 by $2,608.77.

(B.) Statement showing the several localities on account of which moneys have been received. Total amount $18,522.98. Of this sum the Ordnance lands in the City of Ottawa produced $5,889.28, an increase of $2,282.65 over the corresponding ten months of 1894. This result, it may not be out of place to observe, has been accomplished without resorting to legal proceedings in a single instance.

By Orders in Council dated respectively the 4th and 22nd October, 1895, the management of all that part of the Ordnance Reserve on both sides of the Rideau Canal and Basin lying between the Sappers' Bridge and Maria Street in the City of Ottawa, was transferred to the Department of Railways and Canals. This land was held by sundry tenants of this Department at the total annual rental of $867.25.

The claim against the Messrs. Lamoureux Bros. for purchase money and interest due on lot number 39, Chambly, has been satified by the payment of the full amount claimed, with interest to date of payment, amounting in all to $1,862.52. Letters Patent for the lot, excepting a small portion required by the Department of Railways and Canals for lighthouse purposes, have been issued to Mr. Hormisdas Riendeau, the assignee of the original purchaser.

(C.) Statements of amounts received monthly, showing an average revenue of $1,852 29 per month. This sum is made up of collections from many individuals scattered over the older provinces of the Dominion, and in amounts from twenty-five cents per annum upwards.

The annual interest due by the corporation of the city of Toronto on account of the purchase of lands required for the enlargement of the Western Cattle market has been promptly paid. The principal amounting to $52,000 will be due and payable on the 1st of April, 1897.

I am pleased to be able to state that a substantial reduction has been made in the amount of arrears due by purchasers and tenants of Ordnance lands, as shown by the following comparative statement:—

Arrears due by tenants, 1894	$25,581 78
do purchasers, 1894 (exclusive of the amount due by W. H. Arnton, Montreal)	13,879 91
Total due 1894	$39,461 69
Arrears due by tenants, 1895	$18,613 56
do purchasers, 1895	10,447 22
Total due 1895	$29,060 78

Of the amount remaining unpaid by tenants, $13,350 is due by the Province of Quebec for lands in the city of Quebec held under lease, and $5,263.56 by all other Ordnance lands tenants.

All efforts to recover the amount of the judgment ($8,532.59) against W. H. Arnton of Montreal have proved ineffectual, and acting upon the advice of the Department of Justice the case has been abandoned.

With respect to the work done in this office it is impossible to form any precise or tangible estimate. The duties of the office require constant attendance to answer inquiries and make explanations entailing searches and the examination of records which create a good deal of extra work in addition to that of a purely routine nature. During the past ten months 400 letters were received and filed, 443 letters written in reply; 700 notices were sent to purchasers and tenants in arrear; 33 assignments were examined and registered; 38 drafts of letters patent and leases were prepared, and 137 warrants issued for the Bank of Montreal to receive moneys. The open accounts, numbering 648, have been carefully kept.

I have the honour to be, sir,
Your obedient servant,
P. G. KEYES.

A.

STATEMENT of Sales made during the 10 months ended 31st October, 1895.

Locality.	Number of Lots sold or redeemed.	Amount sold for.	Amount received on account.
		$ cts.	$ cts.
Ottawa	12½ lots	2,426 33	2,426 33
Sorel	3 water lots	30 00	30 00
Windsor	4 acres	1,600 00	1,600 00
	Total	4,056 33	4,056 33

P. G. KEYES.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, 15th November, 1895.

B.

STATEMENT showing the several localities on account of which moneys have been received during the 10 months ended 31st October, 1895.

Locality.	Amount.	Locality.	Amount.
	$ cts.		$ cts.
		Brought forward	5,662 98
Amherstburg	93 16	Ottawa	5,889 28
Burlington Beach	130 00	Oromocto, N.B	00 25
Chambly	1,862 52	Prescott	5 00
Edmundston, N.B	742 94	Point Pelee	400 00
Fort Erie	633 50	Sorel	183 30
Fort Cumberland	75 00	Sarnia	40 00
Grand Falls	155 42	Shelburne, N.S	41 00
Gloucester Tp	100 58	Stamford	252 50
Kingston	1,099 31	Toronto	2,600 00
Montreal	498 67	Wolford	53 40
Niagara	244 88	Windsor	3,304 27
Niagara Falls	1 00	Registration fees	91 00
Owen Sound	26 00		
Carried forward	5,662 98	Total	18,522 98

P. G. KEYES.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, 15th November, 1895.

C.

STATEMENT of Receipts on account of Ordnance and Admiralty Lands for the 10 months ended 31st October, 1895.

Date.	Fees.	Rent or Interest.	Principal.	Total.
1895.	$ cts.	$ cts.	$ cts.	$ cts.
January	24 00	267 10	390 00	681 00
February		1,231 52	1,080 00	2,311 52
March		270 41	389 50	659 91
April	24 00	2,220 21	483 25	2,727 46
May		254 03	272 91	526 94
June	15 60	717 17	1,023 33	1,755 50
July	2 00	1,019 89	196 00	1,217 89
August	16 00	432 20	938 47	1,386 67
September	4 00	2,420 07	1,660 00	4,084 07
October	6 00	2,385 28	780 64	3,171 92
	91 00	11,217 88	7,214 10	18,522 98

P. G. KEYES.

DEPARTMEMT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, 15th November, 1895.

No. 7.

APPENDIX A.

ABSTRACT of Letters Patent, covering Dominion Lands situate in Manitoba, the North west Ter itories and British Columbia, issued from the Department of the Interior between the 1st January, 1895, and the 31st October, 1895.

Number.	Nature of Grant.	1895.	
		Number of Patents.	Number of Acres.
1	Homesteads	1,058	167,376
2	Sales	97	12,642
3	British Columbia homesteads	51	7,952
4	do sales	20	2,447
5	Canadian Pacific Railway nominees	107	23,040
6	do do grants	15	3,266
7	do do road bed and station grounds	89	4,869
8	Half-breed allotments	6	1,440
9	North-west Half-breed grants	19	4,035
10	Manitoba Act grants	5	759
11	Special grants	36	2,410
12	Commutation grants	5	363
13	Manitoba and North-western Railway	206	40,369
14	Manitoba South-western Colonization Railway	13	1,568
15	Hudson's Bay Company	12	17,500
16	Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Company	1	5
17	Military homesteads	11	3,412
18	School lands sales	27	1,648
19	Parish sales	12	786
20	Coal land sales	2	303
21	Mining sales	3	111
22	Forest tree culture	2	320
23	Leases	6	794
24	Foreshore rights	4	.....
25	Assignments of mortgages	2	.....
26	Calgary and Edmonton Railway	3	640
27	Shuswap and Okanagan Railway	5	.....
28	Mineral rights	19	307
	Total	1,836	298,363
	Number of patents issued during the corresponding period of the year previous.	2,118	350,199

WM. M. GOODEVE,
Chief Clerk, Patents Branch.

DEPARTMENT OF THE INTERIOR,
PATENTS BRANCH,
OTTAWA, 22nd November, 1859.

APPENDIX B.

The following is a comparative statement of the Homestead entries and Sales which have been made at the several agencies of the department during the 10 months ending 31st October, 1894, and the 31st October, 1895, respectively.

—	Ten months ending 31st October, 1894.		Ten months ending 31st October, 1895.	
	Number of Entries.	Acres.	Number of Entries.	Acres.
Homesteads	2,683	429,280	2,114	338,240
Sales		14,047		27,436

WM. M. GOODEVE,
Chief Clerk, Patents Branch.

DEPARTMENT OF THE INTERIOR,
PATENTS BRANCH,
OTTAWA, 22nd November, 1895.

APPENDIX C.

STATEMENT of entries affecting Dominion Lands made at head office from 1st January to 31st October, 1895.

Special Grants.		Hudson's Bay Co.		Canadian Pacific R'y Co.		Man. & N. W. R'y. Co.		Man. S.W. Col. R'y Co.		Qu'Appelle L.L. & S.R & S. Co.		Cal. & Ed. R'y Co.		Railway Right of Way.		Total.	
No.	Acres	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No	Acres.
58	11,505	11	149,419	205	37,646	145	47,580	10	1,634	1	5	3	640	118	7,000	551	255,429

WM. M. GOODEVE,
Chief Clerk, Patents Branch.

DEPARTMENT OF THE INTERIOR,
PATENTS BRANCH,
OTTAWA, 22nd November, 1895.

APPENDIX D.

STATEMENT showing the number of Deeds of Transfer recorded at head office, from the 1st January to the 31st October, 1895, and the amount received as fees therefor.

—	No.	—	$ cts.
Number of Deeds registered.	120	Amount of Fees received.	240 00

WM. M. GOODEVE,
Chief Clerk, Patents Branch.

DEPARTMENT OF THE INTERIOR,
PATENTS BRANCH,
OTTAWA, 22nd November, 1895.

APPENDIX E.

STATEMENT shewing the number of Patents forwarded to the several Registrars of the Land Registration Districts of the North-west Territories, and number of notifications mailed to patentees from 1st January to 31st October, 1895.

Registration Districts.	Number of Patents sent to Registrars.	Number of Notifications mailed to Patentees.
Assiniboia	454	530
East Saskatchewan	41	56
West do	10	14
North Alberta	215	260
South do	54	71
Total.	774	931

WM. M. GOODEVE,
Chief Clerk, Patents Branch.

DEPARTMENT OF THE INTERIOR,
PATENTS BRANCH,
OTTAWA, 22nd November, 1895

APPENDIX F.

STATEMENT showing the number of cancellations of entries effected from the 1st January to the 31st October, 1895, showing also the year in which the entries had been made.

Year.	Homesteads.	Pre-emptions.	Pre-emption Sales.	Time Sales.
1874	1	2		
1875	2	1		
1877		2		
1878		1		
1879	1	2		6
1880	1	5		26
1881	2	6		1
1882	8	36		
1883	7	47		
1884	9	34	3	1
1885	6	11	3	
1886	11	12	1	2
1887	16	11	1	
1888	35	18	7	
1889	74	75	4	
1890	45		3	4
1891	105		3	4
1892	234			2
1893	291		2	
1894	296			1
1895	78			
	1,222	263	27	47

WM. M. GOODEVE.
Chief Clerk, Patents Branch.

DEPARTMENT OF THE INTERIOR,
PATENTS BRANCH,
OTTAWA, 22nd November, 1895.

APPENDIX G.

STATEMENT showing the number of acres of Swamp Lands in Manitoba passed by Order in Council to the Province of Manitoba up to the present time.

		Acres.
By Order in Council of	21st April, 1884	104,740
do	16th April, 1888	52,600
do	7th June, 1888	60,335
do	25th August, 1891	105,635
do	7th December, 1891	36,479
do	22nd April, 1893	69,680
do	21st October, 1893	13,040
do	4th October, 1895	50,602
		493,111

WM. M. GOODEVE,
Chief Clerk, Patents Branch.

DEPARTMENT OF THE INTERIOR,
PATENTS BRANCH,
OTTAWA, 22nd November, 1895.

PART II

DOMINION LANDS SURVEYS

Department of the Interior.

DEPARTMENT OF THE INTERIOR,
TOPOGRAPHICAL SURVEYS BRANCH,
OTTAWA, 9th November, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the following report upon the operations of the Topographical Surveys Branch during the season of 1895. The surveyors being still at work in the field it is not possible, at this early date, to submit a complete report of their operations, and the remarks which follow are necessarily an imperfect description of the year's work. The very limited amount of our appropriation precluded any but the most urgent surveys being undertaken.

MANITOBA.

Three survey parties were employed in Manitoba.

Mr. C. Æ. Shaw renewed the surveys of townships adjoining the international boundary at Turtle Mountain. Most of these townships were covered with heavy timber; the wooden posts of the original survey had rotted away and the cut lines were grown up and could not be seen. With the iron posts now in use the new survey is likely to last a long time.

Mr. H. G. Dickson corrected errors in the original surveys of township 14, range 14, and township 16, range 16, west of the principal meridian. He also made a re-survey of part of the town site of Selkirk. Two subdivision surveys had been made at this place, one by the Government and one by a private party; to adjust the claims under the different surveys was the object of Mr. Dickson's work.

Mr. P. R. A. Belanger continued the subdivision surveys in the Lake Dauphin district on which he has been engaged for several years. New settlers are constantly coming in, and it is probable that the services of a survey party will be required there for several years.

NORTH-WEST TERRITORIES.

Mr. Thomas Fawcett was, as in former years, at work in the Prince Albert district. Besides renewing some old surveys he subdivided several townships. His description of the lands made available for settlement is most encouraging and shows that there is room in Prince Albert district for a large farming population.

The largest portion of our force was just east of the Rocky Mountains, where we had six survey parties, four of them being engaged on subdivision surveys and two on irrigation surveys.

Mr. E. W. Hubbell had charge of the work around Edmonton and Beaver lake. His surveys were of a miscellaneous character, including subdivision of townships, renewal of old lines, and the location of trails.

Mr. J. E. Woods was engaged on subdivision surveys between Gull lake and Calgary; Mr. F. W. Wilkins between Calgary and the international boundary. Both endeavoured to meet, as far as possible, the demands of settlement.

Mr. C. A. Magrath subdivided about two townships just north of the Milk river ridge. The land is very good, and there are already a number of settlers in the neighbourhood.

BRITISH COLUMBIA.

Only one surveyor, Mr. John Vicars, was employed in the Railway Belt, B.C. The surveys being scattered throughout the whole length of the province, much time was lost in travelling, and the work is in consequence most expensive. Still this seems the most economical way of conducting these surveys. To subdivide whole townships, as is being done in the North-west Territories, would require a very large outlay—out of proportion to the returns to be derived therefrom.

YUKON DISTRICT.

Mr. William Ogilvie was instructed to proceed to the Yukon district for the purpose of attending to the surveys and land matters generally. His first duty is to mark approximately the 141st meridian of longitude, which is the boundary between Alaska and Canada, so that the Mounted Police stationed there may know how far their jurisdiction extends. He is also to lay out into lots such lands as may be applied for. He has just reported his arrival at Fort Cudahy (end of August), at the junction of Forty-Mile creek with the Yukon river. He is expected to spend the winter there and to return next fall.

IRRIGATION SURVEYS.

The irrigation surveys, which were commenced last year, have been continued during the present season. They were, as formerly, under the direction of Mr. J. S. Dennis, Chief Inspector of Surveys, with Messrs. A. O. Wheeler and T. D. Green as surveyors in charge of the parties.

Mr. Wheeler's work was more particularly in the foothills of the Rocky Mountains, making such surveys as were necessary to give some idea of the topography and hydrography of this region.

Mr. Green continued the general line levels and made a preliminary location of two canals, one to divert the waters of the St. Mary river to the bench lands east of it, and one heading in the Bow river near Calgary and extending east near the Canadian Pacific Railway.

OFFICE WORK.

The correspondence consisted of :—		
Letters received		1392
Letters sent		1751
The accounts examined and payments made were :—		
Accounts examined and passed		217
Amount of accounts	$77,991	59
Cheques forwarded		758
Following is a synopsis of the work of the draughting office :—		
Plans and field-notes of subdivision examined		44
Plans and field-notes of correction and miscellaneous surveys examined		77
Township plans completed for printing		96
Declarations of settlers received		93
Progress sketches received		62
Proofs examined		133
Miscellaneous plans, tracings, &c., made		178

The following "Sectional Maps" have been issued :—

Antler,	Portage la Prairie,	Moosomin,
Cut Arm,	Winnipeg,	Brandon,
Duck Mountain,	Battleford,	Pelly,
Riding Mountain,	Carleton,	Manitoba House.
Dufferin,		

Mr. T. A. Pope has been employed under the direction of the New Westminster agent at the Lands and Works Department, Victoria, making copies of the records relating to lands within the railway belt alienated by the province prior to the transfer to the Dominion. Copies of fourteen township registers in New Westminster district have already been received, together with three hundred and thirty files of papers relating to other parts of the belt. The investigation and classification of these papers has taken a considerable portion of the draughtman's time.

The work of the lithographic office is detailed in the schedule appended: it shows a total of 18,225 copies printed from 224 originals.

The photographers were mostly employed for the Geological Survey department and the Alaska Boundary Commission: their work is as follows:—

Topographical Surveys Branch.

Wet plates	105
Bromides	20
Albumen prints	31
Aristo prints	142

Immigration and other Branches.

Wet plates	40
Albumen prints	318
Transparencies	36

Alaska Boundary Commission.

Wet plates	41
Bromides	1082
Albumen prints	382
Aristo prints	2843
Dry plates developed	355

Geological Survey Department.

Wet plates	12
Bromides	37
Albumen prints	342
Dry plates developed	272
Rock sections-coloured photographs	14

The above statement shows that only a small portion of the work executed was for the Topographical Surveys branch. Mr. Topley, who is in charge of the photographic office, was absent two weeks on duty for the Immigration branch and the Geological Survey department.

BOARD OF EXAMINERS.

The regular meetings of the Board of Examiners for Dominion land surveyors were held as usual in February and August.

At the former meeting, Mr. W. F. O'Hara, P. L. S., of Chatham, Ontario, passed examination for Dominion land surveyor.

The correspondence of the board amounted to:—

Letters received	55
Letters sent	45

One of the members of the board, Mr. Bolton Magrath, has been removed by death; he was one of those appointed by the government at the formation of the board in 1875.

The following documents are appended:—

Schedule of Dominion land surveyors employed.

Schedule of work executed by the lithographic office.

Report of the Chief Inspector of Surveys.

Reports of surveyors employed.
Examination papers of the Board of Examiners for Dominion land surveyors.

I have the honour to be, sir,
Your obedient servant,
E. DEVILLE,
Surveyor General.

SCHEDULE of Dominion Land Surveyors employed, and work done by them during the season of 1895.

Name.	Address.	Description.
Belanger, P. R. A.	Ottawa, Ont.	Sub-division of townships 26, ranges 16 and 22; part of townships 23 and 24, ranges 14 and 21; part of townships 26, ranges 23 and 24; north boundary of township 28, range 18; part of north boundary of township 28, range 17; east boundary of township 29, range 19; and the east boundaries of townships 29 and 30, range 18, all west of the Principal Meridian.
Dennis, J. S.	Ottawa, Ont	Inspection of contract No. 1; and in charge of irrigation surveys.
Dickson, H. G	Brandon, Man.	Correction of surveys in township 14, range 14; township 16, range 16, west of the Principal Meridian; and resurvey of Selkirk townsite.
Fawcett, Thos.	Ottawa, Ont.	Subdivision of township 44, range 25; parts of townships 43, ranges 25 and 26; resurvey of east boundaries of townships 41 and 42, ranges 25 and 26; resurvey of townships 45, ranges 23 and 25; correction of surveys in township 45, range 21, and township 47, range 22; survey of east boundaries of townships 41, 42, 43, 44, range 24—all west of the Second Meridian.
Green, T. D.	Ottawa, Ont.	Irrigation surveys.
Hubbell, E. W.	Ottawa, Ont.	Subdivision of township 55, range 12; township 49, range 23; township 41, range 28; parts of townships 52 and 53, range 18; north boundary of township 54, range 12; resurvey of the 14th correction line across ranges 19, 20, 21, and part of 22; resurvey of east boundaries of townships 54 and 55, ranges 19, 20, 21, and 22; re-establishment of corners in township 53, range 22; traverse of Koney Island in Cooking Lake; traverse of part of Battle River, in township 43, range 25—all west of the Fourth Meridian; and survey of Stony Plain trail.
Magrath, C. A.	Lethbridge, Alta.	Contract No. 1: Sub-division of township 5, range 20; northern one-third of township 2, range 22, and township 3, range 22, —all west of the Fourth Meridian.
Ogilvie, William	Ottawa, Ont.	Surveys in the Yukon district.
Shaw, C. Æ.	Deloraine, Man.	Resurvey of townships 1, ranges 22 and 23; resurvey of part of township 1, range 20; resurvey of east and south boundaries township 1, range 21; resurvey of north, south and east boundaries township 1, range 23; resurvey of north boundaries of townships 1, ranges 21 and 22; and part of east boundary of township 2, range 22—all west of the Principal Meridian.
Vicars, John	Kamloops, B. C.	Subdivision of parts of township 19, range 10; township 20, range 10; townships 21, ranges 8, 9 and 10; township 18, range 14; and township 20, range 15—all west of the Sixth Meridian. Parts of townships 10, 11, 14 and 15, east of Coast Meridian; and traverse of Hatzic slough in township 17, east of Coast Meridian.
Wilkins, F. W.	Ottawa, Ont.	Correction surveys in the Porcupine Hills; subdivision of township 6, range 28; township 5, range 27; townships 4, ranges 27, 28 and 29; North-west Mounted Police reserve at Stand Off—all west of the Fourth Meridian. Part of township 7, range 3; part of township 8, range 3; parts of townships 8, 9 and 10, range 2—west of the Fifth Meridian. Location of water reserve at Walrond Ranche.
Woods, J. E.	Ottawa, Ont.	Subdivision of township 33, range 3; part of township 38, range 2; part of township 34, range 3; township 36, range 2; township 37, range 2; townships 40 and 41, range 1—all west of the Fifth Meridian.
Wheeler, A. O	Ottawa, Ont.	Irrigation surveys.

Department of the Interior.

Lithographic Office.

Printing done from 1st November, 1894, to November, 1895.

Months.	Maps.		Townships.		Circulars.		Forms.	
	No. of Maps.	No. of Copies.	No. of Townships.	No. of Copies.	No. of Circulars.	No. of Copies.	No. of Forms.	No. of Copies.
1894.								
November	4	305	6	318	1	500	6	1,045
December	11	527	8	424	.....	.....	1	200
1895.								
January	5	332	8	424	.....	.....	3	500
February	7	350	7	371	.....	.....	10	370
March	3	339	11	585	.....	.....	13	293
April	4	291	12	680	.....	.....	3	1,130
May	5	836	5	265	.....	.....	4	745
June	4	180	11	583	.....	.....	4	500
July	7	405	12	642	.....	.....	1	100
August	10	1,100	5	265	.....	.....	1	50
September	10	785	3	160	.....	.....	1	20
October	7	878	8	427	4	100	2	1,200
Total	77	6,328	96	5,144	5	600	49	6,153

No. 1.

REPORT OF THE CHIEF INSPECTOR OF SURVEYS.

DEPARTMENT OF THE INTERIOR,
SURVEYS AND IRRIGATION,
CALGARY, 31st October, 1895.

E. DEVILLE, Esq.,
Surveyor General,
Ottawa, Ont.

SIR,—I have the honour to submit my annual report for the past year.

I may preface my remarks by respectfully pointing out that the closing of the departmental year at this date precludes the possibility of a full report being given regarding the season's field operations, for the parties are still at work, and of course it is impossible to speak in anything but the most general terms of the results of our work until the large mass of information procured is properly assembled in the shape of plans and other returns for record.

During the early months of the year I was specially engaged in the preparation of an extensive report on the subject of irrigation and irrigation surveys, which was particularly intended to treat more fully of the subject of the reclamation of our arid areas and of the result of our previous season's irrigation surveys, than was possible at the time of the issue of my last annual report. This report was completed and in the hands of the printers in May last, and will doubtless be ready for issue at an early date.

Almost immediately after the completion of the above mentioned report I received your instructions to proceed to Alberta for the purpose of continuing the irrigation surveys commenced last year, and, in accordance with these instructions, I left Ottawa on the 16th May, accompanied by Mr. T. D. Green, D.L.S., and Mr. R. A. Davy, who had been appointed as levellers, and proceeded to Calgary, reaching here on the 20th.

At Calgary we were joined a few days later by Mr. A. O. Wheeler, D.L.S., who had been detailed to continue the work of Division B. of the irrigation surveys, of which he had been in charge during the previous season.

After a few days delay at Calgary, necessitated by getting the necessary staff and transport together, we were ready for field work; and on the 22nd May I issued detailed instructions to Mr. Wheeler regarding the operations of Division B during the season, and also instructed Mr. Green to undertake the operations of Division A, until such time as I should be able to give them my personal attention.

Before leaving Ottawa I had been instructed by the deputy minister to undertake the administration of the Irrigation Act at this point, and to open the necessary office in connection therewith. It was therefore evident that I should be unable, during the larger part of the season, to do more than pay flying visits to the divisions while at work, so as to enable me to supervise the operations. Copies of the instructions issued for the guidance of both divisions were forwarded you at the time.

Those of Division A contemplated the continuance of the general line levels in connection with our irrigation surveys, and the procuring of the usual topographical information in the vicinity of the lines run. I also embodied in these instructions the necessary information regarding the preliminary location of the St. Mary irrigation canal, which we had been instructed to survey during the season. The results of the season's work of this division will be found more fully treated of further on.

The instructions issued for the guidance of Mr. Wheeler contemplated a somewhat radical change from the operations which had been conducted by him during the previous

season. It had been decided before I left headquarters that this division should be employed during the year in making such surveys of the foot-hill country and the eastern slope of the Rocky Mountains as might be necessary to give us some idea of the topography and hydrography of this region, and also to begin the work of the general trigonometrical survey of the region by the placing of such stations as might be possible in connection with the other work with which the division was charged. The work accomplished by Mr. Wheeler on the line of the instructions given him will be found fully treated of in his report, and it is therefore not necessary for me to refer to them at any length. I may however say that I am particularly pleased with the results of the season's work, and am gratified to find that the system which I outlined to you before leaving headquarters, and which has been followed by Mr. Wheeler in conducting his field operations, has resulted satisfactorily.

Division A commenced their season's field work at bench mark No. 87, at the N.E. corner of township 12, range 28, west of 4th meridian; from thence the line levels were run east across ranges 27, 26, 25, 24 and 23, and then, turning to the south, levels were run along the east boundaries of townships 10, 11, 12, in range 22, to the south-east corner of the first mentioned township, from whence the line between townships 9 and and 10 was followed to the east for six miles, where the work was again continued to the south along the easterly boundary of township 9 in range 22 to the town of Lethbridge, where the usual bench mark was established. Turning again to the east, the northern boundary of township 8 was followed across range 21, when they again turned to the south and followed the eastern outlines of townships 4, 5, 6, 7 and 8 in this range. The line levels were then run westerly across ranges 21, 22 and 23 to the north-east corner of township 3 in range 24, from whence the work was continued to the south for twelve miles along the easterly outlines of townships 2 and 3 in this range, and then run west along the north boundary of township 1 in range 24, from whence the levels were run to the south along the east boundary of township 1, range 25, to the international boundary.

The particular object in view in running the line levels along the township outlines south of township 8, as above mentioned, was to obtain such cross sections of the country as might be of use in locating the St. Mary irrigation canal, and upon the completion of the line levels to the boundary I joined Division A, and we then commenced the actual location of the canal. Our first location headed in the St. Mary river, on section 10, in township 25, range 1, west 5th meridian, and from thence ran north-east until the elevation of the bench land was reached. However, upon reaching the bench land elevation we found that we were too high to enable us to get the water down to the area upon which it was desirable it should be used for irrigation. We, therefore, moved down the stream to section 36 in the same township and range, and commenced a new location at a favourable point on the stream in this section. From this point the canal was located to the north and east along the westerly and northerly slope of the Milk river ridge for some 40 miles, and the Pinepound branch, which was designed to serve the portion of the country between Pinepound creek and the St. Mary river, was also located for a considerable distance. The actual location, so far as completed, when taken in connection with the cross sections of the country shown by our line levels of last year and this year, enables us to say with a very fair degree of accuracy what areas can be irrigated from the main canal and branches, and also to project the necessary distributaries with a sufficient degree of accuracy to permit of the location being completed as construction is undertaken.

As we have not yet completed the plan and profile of this canal I am unable to enter into the details of the proposed location and construction, but propose making this location the matter of a special report as soon as the details are completed. I may, however, say in the meantime that the canal is located to carry 500 cubic feet of water per second, which, under our "Duty of Water," as defined by Order in Council, will serve to irrigate some 50,000 acres of land; and, speaking in a general sense, the location is an advantageous one, and the construction will be within reasonable limits of financial cost.

Upon the completion of this work, Division A proceeded to the Pincher creek district, where some 30 miles of line levels were run, and certain gaugings of streams in the district completed. After accomplishing this work, the division returned to Calgary and undertook the line levels east of this point, and the location of the Bow river irrigation canal, which I had received your authority to complete, in connection with our general work.

The Bow river irrigation canal is designed to take water from the Bow river in the immediate vicinity of this city, and to carry it to the east near the Canadian Pacific Railway for the reclamation of the areas which are now unproductive owing to the prevailing drought. The location of the canal was commenced on the 2nd September, and completed on the 27th of the same month. During this time some 34 miles of the main canal were located, and upon the completion of this work the division continued the line levels of last season to the east, in the vicinity of Cheadle and Strathmore stations on the Canadian Pacific Railway. They were engaged on this work up to the 8th instant, when they returned to Calgary, and the larger part of the staff were paid off. Mr. Green, with a small party, was detailed to place the necessary gauge rods in the streams from the Bow river, south to the Old Man river, upon the completion of which work the field operations were finally closed for the season. The plan and profile of the location of the Bow river irrigation canal are now being prepared, and, pending their completion, I am unable to give any details of the proposed location of this canal or to approximate the cost of its construction. I will, however, make this survey a matter of special report upon the completion of the returns, and hope to be able to give a fair approximation of its probable cost. The location contemplates the construction of a canal to carry 2,000 cubic feet of water per second, and will, by the utilization of the many natural reservoir sites in the vicinity, permit of the reclamation of a very large area of land in the district traversed.

Owing to the fact that the work of this office in connection with irrigation administration has taken up the larger portion of my time, I have been unable to personally supervise the field operations of Division A, and have only been able to pay such visits from time to time as were necessary to superintend the work from a general standpoint, and to issue such instructions as might be required in connection therewith. The field operations have practically been conducted under the charge of Mr. D. L. S. Green.

During the month of September, in accordance with instructions received from the Department, I proceeded to Albuquerque, New Mexico, in company with the Deputy Minister and Mr. Superintendent Pearce, for the purpose of attending the Fourth International Irrigation Congress, and I was absent upon this trip until the 28th ultimo. The results of the trip have been made the subject of a special report, and I therefore need only say that I was able to add largely to the general information which I have procured upon previous trips of a like character, regarding the subject of irrigation from all its standpoints. The work of this office in connection with irrigation administration has now assumed very considerable proportions but as this work is carried on under a system laid down by the Department and through a separate branch, I am submitting a special report in connection therewith to the Deputy Minister.

During the season I issued instructions from time to time to Messrs. D. L. S. Hubbell and D. L. S. Wilkins, relative to the surveys which they had in hand, and in the early part of the season I visited Edmonton for the purpose of settling the question of the location of the different trails in that district which Mr. Hubbell was instructed to survey.

Owing to the fact that the surveyors engaged in correction surveys are still at work, I am unable to follow the custom which has prevailed during late years of attaching hereunto a schedule showing the surveys of this character completed during the year. The only subdivision contract of this season was that given to Mr. D. T. S. Magrath, covering townships in the vicinity of of Lethbridge. The necessary inspection of the work performed by him was made in the usual way, and the customary report in relation thereto will be duly forwarded.

In concluding this report I beg to bear testimony to the satisfactory manner in which the the work of both Divisions A and B of the irrigation surveys has been performed by the gentlemen in charge during the season, and may add that a large portion of the credit for the successful completion of our season's work is due to the readiness with which all instructions have been carried out, and the faithful manner in which the work has been performed.

As I have already stated it is impossible, owing to the early date at which our annual reports have to be closed, to give anything more than a mere outline of the season's field work, and I therefore purpose, with your permission, to follow the practice of last season and prepare a special report in relation thereto, so soon as the large mass of data relative to the topography of the country procured by both divisions is properly assembled in the shape of plans and schedules.

I have the honour to be, sir,
Your obedient servant,

J. S. DENNIS,
Chief Inspector of Surveys.

No. 2.

REPORT OF C. Æ. SHAW, D.L.S.

RE-SURVEYS IN SOUTHERN MANITOBA.

MINNEDOSA, 3rd October, 1895.

E. DEVILLE, Esq.,
Surveyor General, Ottawa.

SIR,—I have the honour to submit the following report on my operations in the field during the past season :—

As outlined in my report of 24th December, 1894, I continued the subdivision of township 1, range 20, west of the principal meridian, till the frost prevented the building of mounds, which, owing to the dense underbrush and a fall of snow before the ground was frozen, was not until January 9th. I then moved west and re-surveyed the east and south boundaries of township 1, range 21, west of the principal meridian, finishing these outlines on January 23rd. I then moved further west and re-surveyed the east and south boundaries of township 1, range 22, west of the principal meridian, finishing this work on February 9th. I then moved on to the west and re-surveyed the east, south and north boundaries of township 1, range 23, west of the principal meridian ; also the east boundary of the westerly tier of sections in that township, as the westerly boundary of the township is on the prairie and the posts and mounds were all standing. This work being completed on the 11th of March I then re-surveyed the north boundaries of townships 1, ranges 22 and 21, west of the principal meridian, finishing this portion of the work on the 21st of March. I also re-surveyed the east boundary of sections 1 and 12 in township 2, range 22, and moved camp to the west side of township 1, range 23, in order to begin subdividing, as the settlers in that township were very anxious to have their lines run. I finished the subdivision of this township on the 8th of May, and moved east to subdivide township 1, range 22. On the completion of this work on the 25th of July, in accordance with your instructions, I moved my party into Deloraine, and paid them off, with the exception of two men who were retained to finish the building of those mounds on the outlines of the townships which the frost rendered it impossible to build during the winter. On the return of these men, on the 24th of August, I advertised and sold my outfit of horses, waggons, etc., by auction at Deloraine ; the prices realized were very poor, owing to the financial depression which existed at that time.

The soil of all the townships surveyed is generally of good quality, but a large portion of the land, notably the southerly and south-easterly portion of township 1, range 23, and the south-westerly portion of township 1, range 22, is exceedingly rough and broken. There is a large amount of excellent hay land in townships 1, ranges 21 and 22. The timber in township 1, range 21, has been nearly all burnt, and a dense second growth of poplar has taken its place, a large part of which has been killed by recent fires ; the same may also be said of the greater portions of townships 1, ranges 22 and 23. As with the work of last season, I found that the original subdivision surveys in all of these townships had veen very imperfectly made, the lines in many cases being exceedingly crooked, having evidently been run with a compass, which caused much delay and loss of time in making the re-survey.

The weather during the winter was unusually fine, and, with the exception of a few days of dense fog which prevented the carrying on of the work, no time was lost ; but during May, June and July, the rainfall was the heaviest that has been experienced in Manitoba for years, involving a considerable delay in the prosecution of the survey.

I have the honour to be, sir,
Your obedient servant,

C. Æ. SHAW,
D. L. S.

No. 3.

REPORT OF P. R. A. BELANGER, D.L.S.

SURVEYS IN DAUPHIN LAKE DISTRICT.

DAUPHIN LAKE, 23rd October, 1895.

E. DEVILLE, Esq,
Surveyor General,
Ottawa.

SIR,—I beg to submit the following report on my field operations during the present season.

In accordance with your instructions dated the 6th of May last I left Ottawa on the 10th of the same month for Oaknook the initial point of my work.

On the way I stopped at Winnipeg to hire my party and buy supplies. While there on the 14th I despatched two men to Oaknook *via* Binscarth to fetch my transport outfit down to Strathclair. I left Winnipeg myself with the remainder of the party on the 18th for Strathclair.

On my arrival there I found my men had just arrived from Oaknook with part of my outfit, being short of one horse which D.L.S. Wood's men had taken away with his outfit. This occasioned a delay, besides the expense, by compelling me to wait at Strathclair for a man whom I sent down to Portage la Prairie to fetch back the horse; so it was not until the 22nd of May that I could leave for Oaknook, where I arrived on the 25th at 5 P.M.

Here I stored some provisions with Mr. Dow, and paid him for the wintering of my horses and outfit; and on the next day I proceeded to township 26, range 22, where I commenced work by subdividing that township. The surveys I performed up to date comprise the subdivision of township 26, range 22, halves of townships 26, ranges 23 and 24, part of townships 23 and 24, range 21, part of townships 23 and 24, range 14, and township 26, range 16, besides several miles of outlining necessitated by the subdivision made up to the present, and to be made during the remainder of the season, making a mileage of two hundred and eighty-six miles of section lines surveyed, plus about nine miles of traverse of lake.

The whole of these surveys are situated west of the principal meridian.

The tract of land I surveyed may be described as follows.

SUBDIVISION.

Township 26, Range 22.—The south-east half of this township is a burnt rolling country now becoming overgrown with scrub, whilst the north-west half is also partly burnt, but much green and dry poplar remain on some sections. The soil is generally a deep rich sandy loam with sandy bottom, and well watered by numerous small streams. Squatters were found on nearly all the even-numbered sections opened for homestead. I even found one on section 8 who would not believe he could not hold his claim as a homestead on that section.

Township 26, Range 23.—The part I surveyed in this township comprises the four eastern rows of sections; the western sections had been surveyed before by D.L.S. Vicars in 1890. The south part of this township for two miles is a burnt country which may be considered as prairie, though at one time it was solid bush to judge by the stumps and roots left here and there. The remainder of the township has also been opened by fire, but there is much bush left on sections 21, 22, 27, 28, 33 and 34, whilst the eastern sections are burnt and mostly covered with green and dry willow and poplar scrub, with scattered bluffs of poplar.

This township is also partly settled by squatters who had located themselves by running compass lines from the township boundaries.

The soil is rated first-class; it is of the very best quality, and well adapted for mixed farming.

Township 26, Range 24—Is generally a heavy rolling burnt country in the south-east half, the part I surveyed. The north-west half appears very hilly and occupied by Duck mountain; it also appears to be heavily timbered.

The soil in the part surveyed is of the best quality. It is a deep black loam with clay subsoil. It is well watered by numerous small streams and well adapted for mixed farming.

Several squatters were also met with in this township.

Township 26, Range 16—Is a fractional township of which the north-east half only is dry land. The remainder is occupied by Dauphin lake. It is a burnt country with low scrub intermixed with pea vines and vetches. Numerous hay marshes or meadows are met with.

The soil ranks first-class, and is well adapted for mixed farming or stock raising. Three squatters were found in this township.

Township 23, Range 21—In this township I surveyed only section 32 which I found all occupied by four settlers who had put up their buildings on a burnt opening in the centre of the section.

The remainder of this township is generally heavy bush, or old brûlé overgrown with a thick and high second growth intermingled with heavy windfalls.

The soil is of the richest quality for wheat cultivation.

I postponed the survey of this township as there were surveys more urgently required for this season.

Township 24, Range 21—The part I surveyed of this township comprises the south-east quarter, the remainder having previously been surveyed by D.L.S. Woods.

It is partly burnt and partly timbered with large poplar or heavy second growth. Sections 12 and 14 are the most open, and are partly occupied by settlers. One of them who had taken a homestead on section 14, died at 30 miles distant from his homestead, while on his way from the old country to his new home.

The land is rated first-class, and is watered by small streams and numerous hay marshes. It is very well adapted for mixed farming.

Township 24, Range 14—In this township I surveyed only the two western rows of sections which I found partly opened and offering some advantages for immediate settlement. The remainder of the township is nothing but bush or heavy second growth with windfalls, interspersed with swamps and muskegs; and besides that the land is very stony and gravelly and will never be fit, when opened, for anything but grazing land.

The surveys of this fraction of a township involved a great loss of time; it necessitated the re-survey of the base line which was found entirely obliterated. The soil in the part subdivided is fair. Sections 6 and 18 were partly taken up by settlers as soon as surveyed.

Township 23, Range 14.—I surveyed two-thirds of the west half of this township at the request of several settlers of Ste. Rose du Lac, St. Alphonse and St. Laurent who were in search of land and desired to settle in this township. I also made this survey to compensate for the part left unsurveyed in township 24 which I had been instructed to subdivide, and which I found unfit for settlement.

The part I surveyed may be described as scrubby country well adapted for mixed farming purposes.

The soil is sandy loam with sandy subsoil, and is rated first and second-class. As in all the other townships, some settlers took up land there during the course of my survey, and a whole family were already living in their new home before I left the ground.

8th Base Line.

Township 28, Range 17.—The west half, the part I surveyed in this range, runs, with the exception of the east half of section 33, through a heavily timbered country, mostly large spruce on west half of section 33 and across section 32.

Section 31 is covered with large poplar and windfalls. A certain percentage of the bush has been killed by fires. The land is generally low and interspersed with swamps; it is rated 2nd class.

Township 28, Range 18.—The base line in this range strikes Dauphin lake in the west half of section 36; it runs through poplar partly fire killed. The country rises somewhat towards the lake, and is classified as good for farming purposes.

Township 29, Range 18.—On the east boundary, from the base line north for one and a-half miles this line runs through a boggy willow swamp unfit for anything. The remainder of the line is timbered with poplar, partly dry and averaging in size 6 inches diameter, which would be found very useful for fence rails. Boggy swamps are met with on every mile. A large one runs northerly at a short distance from the meridian in sections 13 and 24, and is crossed in section 25 where it turns north easterly. On the north half of section 36 the line crosses a hay meadow or marsh which extends easterly for over a mile, and towards the south west extends to a large muskeg which itself connects with a large one which occupies the greater part of the south half of the township.

The soil is good enough on dry land for farming purposes. It is rated 2nd and 3rd class. The north boundary of this township runs all the way through timber consisting mostly of poplar with scattered spruce partly killed by fire. It is also much broken by boggy willow swamps and muskegs in the three eastern miles; but across the western sections the country rises, and the soil improves and becomes of the best quality in the vicinity of the Mossy river which is crossed on the west half of section 31.

Township 30, Range 18.—The east boundary of this township runs for the first four miles from the south boundary through a bush country covered with poplar averaging 6 inches diameter, and generally good only for fence rails. The soil in that part may be rated 2nd class; it is gravelly on sections 13 and 24. In sections 25 and 36 of this township, the line runs through a muskeg and hay marsh where large quantities of good hay may be secured.

In the interior of this township the land is low with numerous muskegs and swamps over the east half, but a good belt of land lies in the vicinity of the Mossy river which runs through the west half, and along which several squatters are already residing on their claims.

Lake Winnipegosis lies at about 20 chains north and east of the north-east corner of this township.

Township 29, Range 19.—The east half of this township is, with the exception of the two northern rows of sections, all timbered, but a great percentage of the timber has been fire killed.

Hay marshes are numerous and supply large quantities of good hay. Two streams, Fork river and Fishing river, besides smaller ones, run across easterly and empty themselves in the Mossy river which runs across the east boundary in a northerly direction.

In connection with the survey of the 8th base line, and the outlining of townships 29 and 30, ranges 18 and 19, I beg to say that this work was done in compliance with your letter dated the 2nd July in which you instructed me to survey all the land suitable for settlement at Mossy river.

The settlers in that district are mostly located along the Mossy river between Dauphin lake and lake Winnipegosis, and to survey their claims I had to run all the above described outlines, which survey greatly hindered the progress of the subdivision work. Some of the outlines had already been surveyed, but they were found so erroneous as to necessitate a re-survey.

As to the agricultural capabilities of the tract of land I surveyed during the present season I hardly need to add anything to the reports already published on that country to demonstrate its qualities. The fact that the greater part of the land available for homestead is already settled, proves that its merits have been appreciated.

As to my own opinion, I do not hesitate to say that the land in townships 26, ranges 16, 22, 23 and 24, as well as in township 24, range 21, is of the very best

quality. It is impossible to find better land anywhere in Manitoba. It is generally well watered by numerous creeks and covered with a luxuriant vegetation, consisting of pea vines, vetches and fine hay, which render it very suitable for mixed farming and stock raising.

Good land is also found in townships 23 and 24, range 14, as well as in part of townships 29 and 30, ranges 18 and 19, where several settlers have already taken homesteads along the Mossy river.

Forty-three statutory declarations of settlers have been taken up to date, and many more could have been secured had I not run short of forms during the summer, when all the settlers were on their claims busy in building houses and breaking land.

I am now engaged in subdividing part of township 29, range 19, and I propose to spend the remainder of the season in extending the subdivision along the Mossy river in townships 30, ranges 18 and 19.

I have the honour to be, sir,

Your obedient servant,

P. R. A. BELANGER, D.L.S.

No. 4.

REPORT OF J. E. WOODS, D.L.S.

SURVEYS IN RED DEER DISTRICT.

TOWNSHIP 36, RANGE 3, WEST OF 5TH MERIDIAN, 22nd October, 1895.

E. DEVILLE, Esq.,
Surveyor General,
Ottawa.

SIR,—I have the honour to submit the following report of my operations performed in central Alberta and west of the fifth meridian, under your instructions of the 5th May.

I left Ottawa on the 9th May, reaching Winnipeg on the 11th. I immediately sent two men to Dauphin lake with orders to take my outfit to Portage la Prairie, as well as the one wintered at Westbourne.

After purchasing supplies in Winnipeg and shipping them to Calgary, I met my outfit at Portage la Prairie on the 21st; some delay was caused by having to travel for two days through twelve inches of snow. I disposed of part of the outfit, and then shipped the remainder to Calgary for the use of my party.

I arrived in Calgary on the 24th, and at once hired the men I needed. The next three days were spent in unloading horses and outfit, repairing carts, harness, etc., and unloading supplies.

The first field work of the season was begun on the 1st June, in township 33, range 3, west of the fifth meridian. Several squatters had already located here, and a few had made extensive improvements.

The Little Red Deer river enters this township at the south-west corner and flows swiftly over a gravel bed in an easterly direction for a distance of three miles, when it suddenly turns north and winds its course through a deep valley which rises rapidly to the east and to the west for a distance of two miles. At low water it can be forded almost anywhere. It varies in width from one to two chains. When moving camp to the northern part of this township, instead of cutting a road along the banks where the bush was very thick, we travelled in the bed of the stream, the water being clear enough to enable us to avoid any deep holes. The Dog-pound creek, after running through sections 4 and 10, empties itself into the Little Red Deer on section 9; it is about 75 links wide, and supplies good water all the year round. All along the banks of the river there are numerous small creeks and springs of pure water. The southern and south-eastern parts of this township are mostly prairie, with a few bluffs of poplar and bunches of willow, which become denser toward the north. The western and north-western parts are solid timber, through which I only ran the west outline and the north boundary. On both sides of the river there are fine openings, dotted with patches of scrub and a few poplar. This township is well adapted for mixed farming. The soil is black loam with a clay subsoil, and may be rated as first-class. The grass is most luxuriant, and cannot be surpassed in the west. Hay land is rather scarce; some of the settlers having many cattle to winter take them ten or fifteen miles west to the "Fallen-timber creek," where they can get plenty of hay. One of the settlers has already made preparations to irrigate a part of his claim, so as to be able to have all his hay on his own land.

The climate of this district is said to be similar to that of Calgary.

The timber in the western part is very dense but small; it consists of poplar and balm of Gilead, with a few spruce. Along the river there are a few swamps of spruce

offering very good building timber, and settlers from other townships have already cut their building timber here.

Unfortunately fires have destroyed a considerable portion of this spruce, which is valuable to settlers.

The few sections I surveyed along the Little Red Deer river in township 34, range 3, are all that will probably be required for settlement for a number of years; they are covered with willows and large bluffs of small poplar. The remainder of the township had the appearance of being all timber.

From here I went across country to the Red Deer river with the intention of fording it at Milliford, 6 miles west of Innisfail. The water was so high at the time that all the supplies had to be crossed in a boat, whilst the horses had to swim. The carts and buckboard were easily taken across by loading them down with a few hundred pounds of stone to keep them from overturning, and guiding them across with a rope held in the boat. By crossing at a small angle with the stream the current was found strong enough to push the carts along, the rope being only used to guide and to pull them ashore; for a great part of the distance across they were entirely out of sight under water.

I began the subdivision of township 36, range 2, on the 9th of July. At this time, and for a few days afterwards, the Medicine river could not be forded even at the regular fords.

Not being provided with a canvas boat, I purchased from a settler a very serviceable row-boat, which proved very useful during the season. This river winds its course through the north-east part of the township between well defined banks six to eight feet high; it is about one chain and three-quarters wide, and three feet deep, and flows over a sandy bed at the rate of one mile and a half per hour; it can only be forded at the rapids found at several places along its course, none of which have a fall of more than 18 inches. After heavy rains the stream rises rapidly and becomes difficult to ford even at the regular fords used by the settlers. I crossed it on the 2nd of August when the bottoms of the carts were three inches under water.

The Red Deer runs through the south-eastern part of the township. It is from three to five chains in width and runs very swiftly over a gravel bed. It is subject to sudden rises and falls caused by the melting of snow in the mountains. I traversed only one bank of this river, and determined the position of the opposite bank by measuring at the end of each offset with the sextant the angle subtended by a base of ten links marked on a staff held on the opposite shore; the distance across the stream was readily found from a table prepared for the purpose. I found by actual measurements that the distance deduced from the angles gave results sufficiently accurate to determine a shore line seven chains distant. I found this method to be more rapid than the traversing of both banks especially where the shore is either a cut bank or is covered with willows and bush as was the case along the Red Deer river.

A large creek enters this township in the south-west part and flows east into the Medicine river. In dry weather, water is only to be found in pools, and as it is quite fresh, I presume there must be an underflow. Good water is found at a moderate depth.

The northern and eastern parts of this township are prairie with an occasional bluff of poplar and clumps of willows.

Along the Red Deer river and south of it is nearly all bush; some large poplar and good spruce suitable for building is to be found in the valley. The western part is covered with scattered willows and bluffs of poplar suitable for fence rails.

The soil is black loam with a clay subsoil. A few sand and gravel hills are to be found along the Medicine river.

There are a few good hay meadows scattered over the township, but none of them are of any great extent.

I found several squatters of whom I will make mention further on.

The Medicine river enters township 37, range 2, on section 31, and flows south, passing out between sections 2 and 3. For a distance of three or four miles along this river the country is hilly and broken; at a mile or so from the river it becomes level. The north-east corner is situated on high land and is covered with a dense growth of

poplar suitable for fencing, and contains some scattered building timber. The northern part and the south-eastern part are all prairie. The south-western part which contains the best farming land is covered with scattered clumps of willow and poplar bluffs.

The soil is black loam from 10 to 18 inches in depth, with a clay subsoil; in a few spots it is either sandy or gravelly.

A large muskeg extends across sections 13, 24, 27 and 34, which has supplied a large quantity of hay to the settlers.

In the river valley are several sloughs or old channels flooded every spring by the overflowing of the river forming ponds which never dry up.

Settlers have cut ditches from a few of these ponds to carry off the water when the river becomes low. By this method these sloughs are irrigable every spring and produce a luxuriant crop of hay.

This township and the one south of it were settled by Icelanders a few years ago, most of them having come from the States; they speak good English. They live entirely by ranching and dairying, sending their milk in summer and winter to a creamery four or five miles east of the settlement. They have a good school house which would be a credit to many an older and richer settlement. There are good trails all through this settlement, the principal ones leading to the creamery and to Tindestoll post-office, five miles distant.

On the 23rd of August I began the subdivision of township 40, range 1. The north-east corner bordering on Gull lake is covered with poplar partly destroyed by fire. The remainder is covered with short scrub, and a few bluffs of small poplar, and clumps of willow.

The Blindman river runs from north to south across the township; it is about one chain and a half in width, and very crooked. It has a slow current at low water, although there are numerous small rapids where it can generally be forded. The bottom is generally sandy, but in places it is soft and muddy. Heavy rains cause this river to rise rapidly; I have seen it rise three or four feet in as many days. A large creek of good water runs through the south-western part of the township and empties itself into the Blindman. Several small creeks and springs are to be found along the banks of this river. The outlet of Gull lake runs through the northern part of the township in a deep ravine, and empties into the Blindman.

The land rises rapidly to the east and to the west of the river; it is very high and hilly in the north-west corner.

It is about 20 miles by trail to Lacombe, the nearest post-office and railway station.

The Blindman river runs through the south-western part of township 41, range 1. The banks are high and in places very steep. To the west of the river the country rises rapidly and consists of prairie with bluffs of poplar, with some good spruce and willow clumps. To the east, the country rises for two miles, and is mostly prairie with short scrub; further east it becomes hilly and broken and slopes to Gull lake and is covered with poplar from 10 to 15 inches in diameter. There is some very large spruce on sections 33 and 34.

Through this timber the fires have made large openings now covered with small scrub, burnt logs and stumps. The west shore of Gull lake is near the south-west corner of section one and runs in a north-westerly direction to near the north-east corner of section 33. Part of the shore line is low and marshy and in places it is a cut bank with fallen timber projecting into the water.

I noticed along the shore of the lake a quantity of petrified wood, some specimens being three feet long and fifteen inches in diameter.

This lake is a beautiful sheet of water fourteen miles long and four wide; the water is soft and clear and abounds in fish.

The soil along the Blindman river is all black loam from ten to eighteen inches deep with a clay subsoil, while on the high land to the east it is clay loam.

I found only one settler in this township; he lives entirely by ranching.

Township 38, range 2, which I afterwards subdivided, is all covered with small scrub and scattered clumps of small poplar, with a few bluffs of large spruce and tamarack fit for building purposes.

The surface is knolly and cut up by numerous muskegs and hay marshes. The soil is all first-class being either black or clay loam.

The Medicine river runs through the south-west part; on section 18 it receives the water of two small creeks running out of the muskeg to the east. Good water is to be had by digging wells to a small depth.

Only two settlers have located here; they are within fifteeen miles of Red Deer station; they travel over the old trail from Red Deer to Rocky Mountain house.

No doubt this township will soon be taken up on account of the abundant supply of hay it contains.

Since the 15th inst. I have been subdividing township 36, range 3, but am not advanced enough to be able to report on it. I have at present a little over 300 miles of work completed, but I cannot give any estimate of the amount I shall be able to complete before the end of the season, as it will depend altogether upon the weather.

The summer has been cold and showery, but since the 20th of September, when a few inches of snow fell, we have had beautiful weather.

I have the honour to be, sir,

Your obedient servant,

J. E. WOODS, *D.L.S.*

No. 5.

REPORT OF T. FAWCETT, D.T.S.

SURVEYS IN CARROT RIVER DISTRICT.

Township 44, Range 24, West of 2nd Meridian, 13th October, 1895.

E. DEVILLE, Esq.,
Surveyor General,
Ottawa.

SIR,—I have the honour to acknowledge the receipt of your communication dated the 22nd September, informing me that it was your intention to make your annual report before the end of October, and requesting that a report on my season's operations be forwarded previous to that date. I will endeavour as far as possible to comply with this request, but it must be expected that a report written under the disadvantages of camp life will be very imperfect.

Without attempting to follow out any general arrangement as relating to the townships taken separately, I will merely report from my memory what has been accomplished and the order in which the work was done, adding remarks on the soil and other characteristics which may be of interest.

Leaving Ottawa on the 10th of May and spending two days at Winnipeg procuring outfit and supplies, I reached Prince Albert on the night of Saturday the 18th of the same month. Monday and Tuesday following were spent in securing a suitable survey party, bringing in horses and outfit from Tennant's and making further arrangements for securing and forwarding supplies. The three days following were spent in travelling out to Waterhen lake and fitting up tools ready for use. A portion of Waterhen lake in township 45, range 21, had dried up since the original survey was made. The present limit of the lake had to be ascertained by traversing, and the reclaimed portion, consisting mostly of meadow-land, subdivided. The lake as at present found is nothing but a large marsh, and in a few years a much larger portion will have been reclaimed. In ten years, probably, little of the lake will remain, though at present it covers about six thousand acres in area. Where the land has been reclaimed the soil as a matter of course consists of vegetable mould intermixed with black sand and other alluvial deposits consolidated into a peaty mass several feet in depth, the same as found in the majority of the meadows, and which is so injuriously affected by burning during a dry season.

My next work was re-posting township 45, range 23, west of the 2nd meridian. The posts on the base line bounding this township on the south having been destroyed by fire or disappeared through other causes, the line was re-opened and posts re-established from corner to corner of the township. On the west and north boundaries the old posts or remains thereof were found, and these were replaced by new ones according to present regulations. The east boundary had been re-posted by D. L. S. Belanger, two years ago, north three and a half miles, to the township surveyed under a different system. The remainder of this line was completed by my party and the road allowance separating the two systems was posted on both sides.

In reposting the interior of the township, all the lines were re-opened and old posts replaced by new ones, and the corners futher perpetuated by mounding.

In a few places two lines and duplicate posts were found. In three such cases new lines had to be opened out and a new position for the posts established, both of the old posts being too far out of place to admit of perpetuation, there being no reason why one of the posts should be adopted rather than the other.

Where two posts were found to mark the same section corner as mentioned above, it appeared to have resulted from running lines to that corner from two different directions; as these did not meet, the surveyor seemed to think he could mend matters by planting two posts. I presume the idea was to make one govern on each line, but as there is no provision in the Dominion Lands Act, nor in any of the instructions, for planting posts in that way, the corners were not legally established and had to be re-established by measurement from the other posts.

The greater portion of the entire area is covered by a dense growth of poplar timber and brushwood, the poplar averaging from 3 to 6 inches in diameter. In former years it has been covered with timber of much larger dimensions and in some sections the timber still remains. From this source many of the settlers from Carrot river secure their common building timber, also their supply of fence rails and fuel. The young timber is all thrifty-looking and growing very fast, and in a few years more it should be of great value to the people in that part, as it is the most conveniently located of any which is accessible to the Carrot river settlement,

The only resident settlers are several families of French half-breeds, formerly of of Batoche, who have settled in section 2 on the Carrot river at the outlet of a lake which is situated in sections 2 and 3. These settlers do not raise any crops but keep stock, and they chose this locality because hay is plentiful and convenient, and in the lake they find an abundant supply of fish, principally pike, but very large and of good quality.

Sections 2, 12, 13, 33 and 34 contain the only open land in the township, so that a small portion only is ready for the plough.

The soil is usually a sandy loan and subsoil generally clay, but in some places sand. It is well adapted to the climate, and if unfortunately the timber should be destroyed by fire the land will still be valuable for farming purposes. There are two other lakes besides that mentioned on Carrot river, viz: one partly in sections 32 and 33 and another partly in section 6. These lakes taken together with Carrot river and three small rivulets afford an abundant water supply, and what is more important the water is good.

Work in this township was completed on the 22nd June, and on the 24th I moved with my party to township 45, range 25, west of the second meridian.

The northerly boundary of this township had been re-established by me last fall, and the first work I did in it this season was to run a trial meridian south from one of the posts to the twelfth base line to find the distance and direction, so that an idea how the subdivision should be made could be formed. The survey had been formerly made by D. L. S. Patrick, and my former experience of his work taught me that I would be likely to meet with some surprises, which I certainly did. As far as I could ascertain three of the meridians had never been opened out at all, and as for lines that had been run through, the posts seemed to have been removed to wherever the intersections of the lines happened to come, so that the adjoining quarter sections frequently differed in length or width by over a chain, and, as many of the posts were missing, the only satisfactory thing to be done was to resurvey the township. The posts on the east boundary were re-established and one section corner changed on the west boundary. On the base line adjoining the south boundary I renewed the posts substituting at the section corners iron for wood, and repaired all the pits. All the interior of the township was opened out and corners permanently marked. The township throughout is well adapted for settlement. There is a good deal of scrubby timber and underbrush but much land ready for the plough, and the soil is all that one could desire. There is considerable meadow land, the largest single meadow being in sections 7 and 18; there are also meadows of considerable size in sections 1, 2 and 12. The water supply is not as good as it might be, but there is plenty of it, such as it is. Jumping lake at the south-east cornor of the township and another large lake in sections 6, 5, 7 and 8 contain water that is alkaline and bitter. The bed of a stream which crosses several sections near the north boundary contained good water at the time of survey in pools, and good water was found in several ponds near the east boundary of the township.

Sections 36, 25, 24, 13, 12 and 1 are for the most part timbered, also parts of the sections adjoining these to the west; besides this there is some good timber in bluffs, so that the township contains enough timber for local purposes.

No settlers have taken up their residence here yet, but this is principally owing to their inability to find any marks of survey. This trouble having been remedied I do not doubt that the settlement will make rapid growth in the direction of this portion of the Birch hills when once it becomes known. The new French settlement is approaching it from the west, and several persons have taken up land in the township to the north which was prepared by resurveying last year.

This work being completed on the 17th July left me at liberty to proceed with the new work assigned to me in my instructions.

Township 44, Range 25, West of 2nd Meridian.—The unsurveyed outlines of this township were the east and south boundaries, and the country where they were established is densely timbered, more especially that through which the east boundary runs.

Adjoining the south boundary the timber is about a mile in depth and from half a mile to two miles in depth adjoining the east boundary. Some of the timber is large enough to be used for building purposes, but the bulk of it is not more than five or six inches in diameter. The north-west portion of the township, comprising about two-thirds of the entire area, is made up of prairie broken by patches of timber and scrub, the larger part being open prairie. Here we have soil of unsurpassable fertility, a deep black loam underlaid with clay. Meadow lands alternating with rolling prairie and park like clumps of timber form a tract of country pleasing to the eye and eminently desirable as a place to make a permanent home. Near the north-east corner of section 7 is a flowing spring of excellent water. A band of cattle belonging to Gordon & Ironsides (cattle dealers) has been wintered here several seasons. A man by the name of Shannon, who had located at the spring, kept the cattle along with a herd of his own. Last summer Shannon sold his improvements (consisting of stables on section 18 and house on section 7) to Baker & Macrea of Prince Albert, who have made preparations to keep stock there during the coming winter. The Shannon family have taken their stock and located at a large meadow about ten miles east of lake Lenore. Jumping lake cuts off a small portion of the land at the north-east corner, and two other lakes, one in sections 9 and 10, and the other in section 11, were large enough to be traversed. There are other springs on section 7 besides that where the ranch is located and numerous ponds near the south-west corner in sections 6, 7 and 5. These sections are very hilly, and the hills are frequently covered with stones, and the land would average about third-class, while the greater portion of the remainder is first-class in every respect. Access to the township is made easy by a trail which comes from McKenzie's crossing and passing through the township runs on to Carrot river valley.

Having finished the above on the 16th August, I ran the east outline of township 43, range 25, to the 11th correction line: ran east across the jog and found a post which had been left as a temporary mark some thirteen years ago. Wishing to ascertain the distance to the 11th base line, and also renew the posts on the east boundaries of townships 41 and 42, range 25, I retraced the line south from the correction line. Points of most of the old posts were found, and where nothing could be found corners were re-established. Iron posts were planted at section corners and all pits repaired or new ones constructed.

This completed I followed the base line west to the east boundary of range 26, and on my way north re-opened the line on the east boundaries of townships 41 and 42, range 26, and renewed all corners between the base and correction line. The township through which these lines pass were examined in detail section by section in 1893 by Mr. McLatchie, D. L. S., and the greater part noted by him as first-class land. With his classification of this land I fully concur. It would be difficult to conceive a better soil. Several lakes of considerable size are either entirely or partly in the townships, and in some of these the water is very bad and not at all fit for domestic purposes, but ponds of fresh water and springs are found also, and good water is frequently found very close to an alkaline lake. There used to be a mail station in township 41, range 25, known as Hoodoo, but the place was deserted soon after the railway was built, and the buildings have already succumbed to the influence of the weather.

The township not having been subdivided it was not and is not yet in proper shape for settlement. When the tide of immigration turns in this direction there is room for a good settlement and the country here will doubtless support a large population.

The townships contain very little timber suitable for building purposes, but there is plenty to be had from ten to twelve miles east or south. Scattered poplar bluffs containing considerable timber for fencing and fuel are pretty well dispersed through the townships. Having completed the remarking of these outlines I ran the east boundary of township 43, range 26, and established the positions of township corners on the correction line. The distance between bases I found to be very nearly correct for ranges 25 and 26, but to connect the post planted at the south east corner of township 43, range 26, with the post formerly planted at the south-east corner of township 43, range 27, in running west, I had to deflect the correction line south upwards of 20′, there being a difference of nearly three chains in the latitude and upwards of one and a half chains in longitude.

The sketch sent in with my progress report would show this more clearly. It is evident that the distance between the 11th base and the 11th correction line east of range 27 has been made too short, while the corresponding meridian to the north must be too long. These points I had to accept without alteration, the correction line having been re-opened and posted westward across range 27 by D. L. S. Belanger in 1893.

The southerly two miles of township 43, range 26, was subdivided and made ready for settlement; the northerly part, comprising two-thirds of the township, being timbered, was left until some future time. The portion subdivided was very fine and lies at an angle of from two to three degrees towards the south, sloping towards a long lake, which at its westerly extremity comes to within half a mile of the correction line. The open prairie extends a mile and a half north from the correction line, and the line which bounds the subdivided portion on the north is opened through timber the entire distance across the range. The soil here is first-class, being composed of a rich black loam about twelve inches deep on the surface, and beneath that a friable clay. There is a liberal supply of meadow land, and a luxuriant growth of grass on the high ground. South of the correction line in section 32 of this range some persons have settled on the lake shore and made considerable improvements. The part where they are has not been subdivided yet, but this will have to be done in the near future as the country bordering the lake will soon be taken up. In fact it is a wonder it has been left unoccupied for so long a time. The lake is known far and wide on account of the fish which it contains in such quantities.

Pike are very plentiful and doré are also taken in great numbers. The water is good and, judging from the slope and elevation of the banks the lakes should in many places be of great depth. The length of the lake is upwards of ten miles and the average width about half a mile. It would be large enough to accommodate a small steam pleasure boat, if some enterprising individual in possession of the "needful" should choose this most beautiful situation for his summer abode. All things considered this is a most desirable locality.

Township 43, Range 25.—This township was all subdivided with the exception of sections 31, 32, 33, 34, 27, 28, 29 and 30, the north-west part of the township being covered with dense woods. The lake above mentioned enters this township in section 5, and extends in a north easterly direction to section 23, where it finds an outlet by means of Carrot river. Near the westerly boundary of the township, and in the northerly part, there are a great many small lakes and ponds containing good water and several large meadows producing a good quality of hay. The surface is rolling and in places very hilly. The portion subdivided north of the lake is partly sand with timber, some of which is brulé, together with a dense growth of brushwood. In the burnt country there is generally a thick growth of pea vines among the bush, and this makes excellent feed for stock. South-east of the lake the country is prairie with the exception of a few small poplar bluffs and patches of scrub. The land in spots is covered with boulders, but the portion of stony land is small when compared with the whole. Two settlers have come in from Prince Albert and are building a house on section 14, south of the lake. They are ex-policeman Barry and his father-in-law Mecroix. They say

that several families are ready to move in from town as soon as they are settled down and the survey completed.

This township also is beautifully situated. The wooded hills rising up on each side from the Carrot river valley present a charming picture to all lovers of beautiful scenery, and the rich land and fine meadows in the valley would attract the practical individual, who is more likely to be interested in its general utility and adaptability for producing so many bushels of grain or so many heads of live stock. Before I could proceed with the subdivision of township 43, range 24, which is the last assigned me in my instructions for this year, the outlines had to be surveyed, and this involved running the meridian between the eleventh and twelfth bases east of the range, so as to establish the township corners properly on the correction line. The outline on the east boundary of township 41, range 24, passes through a rolling country partly timbered and watered by several ponds of good fresh water. The timber generally fringes the ponds and attains a diameter up to 10 inches. The higher land is scrubby and a growth of pea-vine intertwined with the brush makes excellent feed for stock. There is also some good meadow land, but a great many of the meadows have been much injured by fire which passed over the country a few years ago. The soil is of unsurpassed richness and would produce enormous crops under proper conditions. A few chains north from the north-east corner of the township the meridian intersects Basin lake. One of the peculiarities of this lake, viz: the dense thicket of standing timber, which extends for some distance from the shore out into the water, was explained, as well as I could suggest an explanation, from what information I could obtain, in my report for the year 1892.

Owing to the presence of this timber the lake could not be triangulated, and I had to run west one mile on the north boundary of township 41, and then run a meridian north six miles to the eleventh correction line distant one mile west from the township boundary. I then ran across the jog, and from the north-east corner of the township I ran south a mile and three-quarters to the north shore of Basin lake. The lake extends about half a mile west from the east boundary of the township. The meridian surveyed north from the south boundary of township 42 for five miles passes through brûlé and scrub. The surface is very uneven and is on the easterly slope of a high range of hills which rises towards the west from Basin lake. A mile south of the correction line we come to dense woods of poplar and birch. About one-third of the timber would be birch, and the average size of both about six inches in diameter, or varying from three to ten inches. The east boundary of the township north of Basin lake, also the jog on the correction line, are similarly timbered. This part of the work finished I moved to the north-west corner of township 43, range 24, and ran a trial line eastward across the north boundary, crossing several lakes and ponds in the Carrot river valley; also some meadows and poplar bluffs, and, on the south-east side of the valley, burnt hills covered with brush, briars and pea-vines, together with considerable fallen timber.

The next work in order was the meridian bounding township 44, range 24, on the east. Running southward from the twelfth base line, we start from the township corner in thick bush, and in the first mile we cross a lake which extends about a mile north-east and a mile and a half south-west from where the line intersects it. The lake is formed by an enlargement of Carrot river, contains good water and I expect, like the other lakes, will be found well stocked with good fish. Other smaller lakes and ponds were crossed, and the water good in all. The country south of the Carrot river is partly timbered and the remainder open brûlé. The surface is hilly, but at some future time will be in demand for farming purposes, after the settlers have learned that their crops are less liable to be injured by frost on high and hilly ground than on level, flat country.

Township 43, Range 24.—Although not yet subdivided this township is on my list of surveys for this season, and if the weather permits it will be completed before I return east. The greater portion of the township is hilly and slopes towards the north-west, forming the right bank of the Carrot river valley. The westerly half of the township is mostly open prairie, alternating with poplar bluffs, or patches of scrub, while the easterly half is largely timbered with second-growth poplar growing among the fallen

timber or standing dry trees, which have been killed by fire years ago. The south-east corner is heavily timbered with poplar and birch. The township is well watered by the Carrot river and several lakes at the north-west corner, also ponds of fresh water in all parts of the township. The portion of the township best adapted for settlement is that part adjoining the west boundary. The soil is good throughout. One settler who has brought his family in from Batoche is building a house on section 32 and making preparations to winter his stock there. His intention is to homestead.

The past summer has been more than usually wet for this part of the country. There have been no very heavy rain storms, but a great many wet days, and as a result it has not been so favourable for our work as an average year would be. Notwithstanding this rainy weather surface water has been uncommonly scarce.

Last summer (a year ago) was very dry and the water in many of the ponds dried up. During the winter there was very little snow and what there was disappeared altogether early in the spring, while the frost continued at night pretty regularly until near the end of May. These night frosts and lack of moisture in the ground put the crops back very much in the spring, and the outlook previous to the 1st of June was the worst for many years. The showery weather which began about the 1st of June and continued throughout the entire summer worked wonders in producing a fair crop from what had been unpromising. The hay is only about half a crop this year. Snow is needed, or rain early in the spring to ensure a crop of hay. There is plenty of feed in the country, but a greater area of meadow land had to be cut to satisfy the requirements of the inhabitants.

By the time my season's work is completed I will have run (including traverse lines) about four hundred miles of survey lines. Taking into consideration the fact that a large portion of the country was timbered, or covered with a growth of brushwood which had to be cleared out of the line, it will be seen that we have made good use of our time.

I have the honour to be, sir,

Your obedient servant,

THOS. FAWCETT, *D.T.S.*

No. 6.

REPORT OF ERNEST W. HUBBELL, D.L.S.

SURVEYS IN THE EDMONTON DISTRICT, ALBERTA.

VERMILION VALLEY, 14th October, 1895.

E. DEVILLE, Esq.,
Surveyor General,
Ottawa.

SIR,—I have the honour to submit the following general report of my field operations during the present season up to date.

Leaving Ottawa on the 10th day of May, I arrived in Edmonton on the evening of the 20th, having been delayed one day in Winnipeg and two in Calgary. The next four days were spent in completing the organization of my party, collecting my outfit, making necessary repairs, &c.

Leaving Edmonton on the morning of the 25th I arrived at Leduc the same night, and was detained there during the two following days by the occurrence, unusual at that season of the year, of a severe snow storm, which covered the ground to a depth of several inches, and made the roads almost impracticable for loaded wagons for the next few days. However I arrived at my starting point township 49, range 25, west of the 4th meridian on the 30th and commenced work on the following day.

This township, with the exception of a few sections on the west side, is covered with thick heavy timber, principally spruce ranging from 8 to 24 inches in diameter, with much windfall and dense underbrush; quite half of this spruce has been killed by recent fires, otherwise some splendid timber, might have been procured here for manufacturing purposes.

The township is interspersed with numerous lakes and muskegs and in places very broken, so that the major part of it is totally unfit for cultivation.

A few German settlers have squatted on sections 18, 28 and 30 which are practically the only sections in the township that are available for agriculture.

The alluvial soil is for the most part a rich black loam varying in depth from 6 to 20 inches, and there are numerous springs and creeks throughout the township.

Taking into consideration the small acreage fit for cultivation in this township and the large amount of survey work required in the Edmonton district during the season, I deemed it advisable to survey only the lines that governed those sections fit for homesteading, besides renewing a portion of the western and southern boundaries.

Should it be considered desirable to complete the survey of this township, I would strongly recommend that it be done in the winter, or at any rate at a time when the ground is frozen; even then pack horses will be required to carry out the work.

Whilst engaged in this survey we were at times delayed by rain, and were almost half the time in water, often waist high.

Leaving on the 20th day of June I moved my outfit via Leduc to Edmonton to make the survey of the Stony plain and Hay lake trails. I completed the work on the former on the 26th of June, but owing to the negotiations for the right of way on the latter trail not being completed I was unable to carry out my intention of surveying it at that time. In the survey of the Stony plain trail I adhered as nearly as possible to the written instructions received from the Chief Inspector of Surveys. I next proceeded to run both sides of the 14th correction line, across ranges 19, 20, 21 and part of 22. This work was urgently required: in fact, long before I had completed the survey the farmers in the neighbourhood were engaged in statute labour on the road. I also rechained all the adjoining

meridians, destroyed all old mounds and marks and built new ones at all the corners both on the correction line and on the meridian.

The original work on this correction line was very badly executed, there being a variation in the width of the road allowance from zero to 4 chains, and in many places no line was run at all, the posts having merely been offset. Very few posts were to be found; in the Beaver hills we were unsuccessful in finding even one. This however was probably owing to the heavy fires that raged in these hills this spring, which totally obliterated any remaining survey marks.

Townships 54 and 55, range 20, will require a complete resurvey from this cause.

I think that with a little judicious expenditure and some manual labour a very good road could be obtained right through the hills, thereby shortening the distance by trail between Fort Saskatchewan and Beaver hills lake by about 25 miles. This is a considerable item, when it is borne in mind that Fort Saskatchewan is the nearest market for the settlers around Beaver hills lake and the Vermilon valley. The local legislature has authorized the opening of a number of road allowances adjoining the correction line, and in a short time good roads with easy access to Edmonton may be looked for; this is a great boon for the settlers in this district which is one of the finest in the whole of northern Alberta, and they fully appreciate the prompt action of the government in this matter.

Mr. F. Fraser Tims, the local member for the district, drove over the line surveyed and expressed himself as highly pleased with the work and the road.

The carrying out of the work on this correction line entailed a great deal of extra labour, as not only were the lines to be run but the finding or endeavouring to find the old posts and lines gave double work with but little satisfaction. However I feel confident that now, fires or no fires, the marks will remain for many years to come.

While thus engaged we had rain nearly every other day, and more than once were compelled to cease work on account of the dense smoke from fires to the north-west of us. I may here state that on the east side of the Beaver hills in the district commonly known as "The Pines" little or no rain fell until August, and in consequence the crops in that neighbourhood suffered beyond recovery.

Leaving "The Pines" on the 27th day of July, I moved my party to township 53, range 22, and renewed the old survey corners, re-establishing those that were not to be found; of these there were many owing to a most disastrous fire that passed over this district in the spring and which destroyed nearly all the timber in the northern portion of the Beaver hills.

I found the ground in many places burnt to a depth of several inches, and it was with great difficulty a clear place, sufficiently large to pitch camp upon, could be found. Under these circumstances fodder for the horses was of course very hard to obtain.

Whilst in this township I endeavoured to run the east boundary of township 52, range 22, in order to establish the exact position of the island in Cooking lake, now known as "Koney Island," and which I had been instructed to traverse, but found that to do this was utterly impracticable, owing to the fallen timber, through which it would have entailed enormous expense and labour to cut even a pack trail. I consequently abandoned this idea, and proceeded to Cooking lake via Edmonton, where, thanks to the courtesy of Dr. Goodwin, a member of the Koney island club, who lent me one of the club boats, I was enabled to land on the island and make a traverse of it.

Koney island is an exceedingly picturesque spot situated about one-half mile northerly from the south-west end of the lake: it contains about six acres, more or less, and is densely wooded with spruce.

The club, who now own the island, have erected a fine summer club-house, with a few smaller cottages. The island is, during the summer months, a splendid rendezvous for the members of the club and their friends; many of them spend their vacation in this shady retreat, and enjoy the boating on Cooking lake. This is a beautiful sheet of water extending east and west about nine miles and about four miles in width, surrounded by immense hills covered with spruce and poplar. One curious characteristic of the lake is that no fish of any size are to be found in its waters.

Leaving here on the 7th of August by way of Edmonton, where I procured fresh supplies, I proceeded to Ponoka and traversed a portion of the Battie river, and re-chained a few of the outlines adjoining the correction line. Of my work here I have already transmitted you a detailed account, and should time permit it is my intention to return to this point later and do some further work on the correction line.

Leaving Ponoka on the 15th of August I travelled, via Lacombe, to Gull lake and commenced the subdivision of township 41, range 28, west of the 4th meridian. Owing to a deflection of ten chains in the base line and a difference in the chainage shown in my sketch of the east outline, I rechained and renewed the corners on these lines, without, however, making any change in the original positions of the posts.

This township is thickly wooded, being entirely covered with poplar and some scattered clumps of spruce and birch. So dense was the timber that we had to use pack horses, cutting out pack trails and sleeping under the "starry canopy of heaven," as carrying the camp equipage was entirely out of the question.

There are no squatters in this township, nor are there likely to be for years to come. The timber, with the exception of some of the spruce, is for the most part small and only fit for fencing purposes. In the course of this survey I had occasion to traverse about nine miles of the shore of Gull lake, and I consider this one of the most picturesque lakes in the North-west: it is about fourteen miles long and four wide, wooded to water's edge, with the exception of a narrow beach, where sand, gravel and boulders alternate; the water is wonderfully clear and of a deep blue where ruffled by the breeze, and altogether it forms a picture very fair to look upon.

From the number of jackfish, pike and suckers found on the beach, I should judge the lake to be well stocked with these fish.

From this point I moved my outfit to Beaver hills lake, by way of Wetaskiwin and the Battle river, arriving at my destination on September 16th, and proceeded to subdivide those portions of townships 52 and 53, in range 18, that are shown on the original survey of 1882 as water, but which at the present time, on account of the lake having receded, are hay lands. By doing this the government has acquired some thousand acres of valuable hay meadow. I also traversed about eighteen miles of the lake shore, in accordance with the instructions I received from you whilst I was at Gull lake.

The new survey, as compared with the old, shows an enormous reduction of water in the lake, which is really a very shallow one.

From here I proceeded, via Whitford lake, to township 55, range 12, west of fourth meridian, situated in the valley of the Vermilion. Of this district I have already spoken fully in my report issued in last year's departmental report, and can only reiterate my opinion that it is one of the prettiest districts in northern Alberta, and an ideal cattle ranching country, where already large bands of cattle are ranging. An idea of the rich feed in this district may be gathered from the fact that Mr. Cinnamon, who is ranching here, has this year disposed of two-year-old steers that dressed seven and eight hundred pounds of beef, and were entirely grass fed.

Township 55, range 12 is nearly all open country, with scattered willow clumps, the surface rolling and in places broken, the higher ridges being generally gravelly, whilst in the lower land or bottoms are many boulders, the soil for the most part being a sandy loam. There are a few large muskegs extending to the Saskatchewan river, which enters the township from the north, then takes a sudden turn to the east and leaves it on the east boundary of sections 36 and 25. The river has fairly high banks on either side, and the numerous bars especially on the north side show where many miners have been washing for gold. Two trails intersect the township, one leading to the Indian reserve at Saddle lake, the other to an old ford known as Todd's crossing. At this place is a log house occupied by Mrs. Todd, a native, who kindly placed at my disposal a species of sieve, by courtesy termed a boat, in which I crossed with my party several times. It was with a prayer of thankfulness we landed after each crossing, as it took at least one man bailing all the time to keep down the water which rushed in through the cracks in the boat.

I finished the survey of this township as well as the north boundary of township 54, range 12 on the 14th October, and it is now my intention to move camp to township 48, range 23 and subdivide it. Numerous requests have been preferred that this work should be done, and from my knowledge of the country in that district I deem it a township more easily surveyed when the ground is hardened by frost than in the summer months. This report having been hurridly compiled in the field, I trust you will overlook any discrepencies that may exist.

In conclusion it is proper I should record my appreciation of the efficient manner in which my assistant, Mr. I. K. Gibson, has performed the duties assigned him. He was of much service in acting as interpreter for me whilst taking statutory declarations in the German settlement at Leduc, being thoroughly conversant with that language.

As will be seen by the report my work this season was very much scattered, covering a large tract of country and necessitating an enormous amount of travel.

GAME.

During the entire season I have noticed a remarkable scarcity of all feathered game. The Vermilion valley, usually teeming with ducks and all other kinds of water fowl, is this year almost destitute of any wild fowl at all, whilst curiously enough it is the one district where I have seen anything like the usual number of prairie chickens.

MINING.

Mining in the old fashioned way has not been prosecuted in this (Edmonton) district with the usual vigour; this was owing to an exodus of miners to the Athabaska river tributaries. I believe however the "boom" in this direction did not come up to the expectations of the "boomers." There are two dredges steadily working for gold on the bars in the Edmonton vicinity.

GENERAL REMARKS.

I desire again to call your attention to the reckless manner in which the iron bars are removed from section corners; in many cases I have had to renew the bar in the same corner several times. I would suggest that the wording of the Act providing for a penalty for the removal of section survey bars be altered, and that instead of being for "removing" any bar, it be made to apply to any person who "not being legally entitled shall at any time have any such bar in his possession," or that at any rate some very stringent measure be taken in this matter.

I have the honour to be, sir,
Your obedient servant,
E. W. HUBBELL,
D.L.S.

No. 7.

REPORT OF J. VICARS, D.L.S.

SURVEYS IN KAMLOOPS AND NEW WESTMINSTER DISTRICTS,

TOWNSHIP 18, RANGE 14, WEST 6TH MERIDIAN,
12th October, 1895.

E. DEVILLE, Esq.,
Surveyor General,
Ottawa.

SIR,—I have the honour to submit the following report of my operations in the Kamloops and New Westminster districts during the present season.

Acting under your instructions, after having with the help of my assistant made a few small location and check surveys at Kamloops and Yale, I organized a party on the 19th of March and proceeded to township 20, range 15, west of 6th meridian, where I subdivided those portions of that township which were squatted on at the time of survey or would probably be settled upon or purchased in the near future.

Having completed this work I moved to the Salmon arm of Shuswap lake where I subdivided part of township 19, range 10, of townships 21, ranges 8, 9 and 10, and of township 20, range 10, all west of the 6th meridian.

On the completion of this work I returned to Kamloops, discharged most of my party, and on the 12th July removed to the New Westminster district where I surveyed part of townships 10, 11, 14 and 15 east of the coast meridian. While engaged in township 15 I received your telegram directing me to make a traverse of part of Hatzie slough in township 17. This traverse I completed on the 4th of October, and, as the wet season was then so close at hand—in fact it had practically set in a month before—I returned to the interior on the following day and commenced a subdivision survey of part of township 18, range 14, west of the 6th meridian, in which I am at present engaged.

The portion of township 20, range 15, west of 6th meridian which was surveyed during the current season is mostly open, mountainous country with a considerable quantity of arable land in the valleys. It is principally serviceable for cattle raising and dairying as, on account of its high altitude, the country is much subject to summer frosts which render the successful cultivation of grain and vegetables, to say the least, very precarious. A Mr. Wilson on section 28 and a Mr. Loyd on section 32, who are both engaged in the dairying industry, inform me that they have so far been very successful in their enterprise. In consideration of the fact that in Kamloops—virtually at their door—fresh dairy butter commands the very fair price of from 30 to 40 cents per pound, I fail to see wherein the pursuit of this industry may not be highly remunerative.

Those parts of township 19, range 10, of townships 21, ranges 8, 9 and 10, and of township 20, range 10, all west of the 6th meridian, which we recently surveyed, are all very similar to one another in character, being heavily timbered bench land mostly arable, and in the arable portions well adapted for the cultivation of grains, vegetables and fruit. The greater part of this land was squatted on at the time of making the survey or very shortly afterwards. Some of these squatters were Americans who had decided to "give Canada a trial," as they expressed it.

Townships 10, 11, 14 and 15 east of the coast meridian have already been described in former reports, and there is little I can say with regard to them that would not be repetition. Six years ago I surveyed the southern portion of townships 10 and and 11, and at that time the country was covered by an almost unbroken forest, with virtually only the Yale road leading through it. To-day roads lead to almost every

settler's door, and there are few of these settlers who have not from 5 to 25 acres cleared and under cultivation.

This may not appear anything very extraordinary in the way of clearing land to those who have gained any knowledge of such work in the lower provinces, but it must be remembered that the bush in this part of the western province is the heaviest in the Dominion and possibly in America. One may dimly realise some of the difficulties with which the settlers here have to contend, when it is pointed out that the trees average from 6 to 10 feet in diameter and from 130 to 160 feet in length, with very thick brush and immense quantities of fallen timber of the dimensions above noted.

The lines which I re-established in townships, 10 and 11 were supposed to have been run at the time of the original survey, but I much doubt in most cases if they were, for on few of them could a post, blaze or even axe cut be found.

What surveys had been made were evidently performed with a compass, and both bearing and chainage were very inaccurate, so much so that it was impossible to know the azimuth on which to run the lines to connect such posts as could be found; the consequence of which was that at least two-thirds of the lines had necessarily to be re-run, a serious delay where the bush is so heavy.

My work in British Columbia this year was of a very scattered nature necessitating a large amount of travelling and consequent loss of time. Nor yet is travelling the only cause of delay, for as one moves from place to place much time is lost in searching for starting points which are at times very difficult to find, and then again much delay may be occaioned by unfavourable weather preventing an observation for azimuth at a time when an observation is absolutely necessary for the continuation of the work, and particularly is this the case at the coast in the fall of the year.

Before closing this report it may not be altogether a degression to mention that the crops in British Columbia, both at the coast and in the interior, have been splendid. I did not learn what the yeild was at the coast, but in the interior 60 bushels of wheat 400 bushels of potatoes and from 2 to 3 tons of hay to the acre is a commonly reported yield. It is true that the prices for produce are low in comparison with those of other years, but they compare very favourably with the quotations in the other provinces of the Dominion, and are remarkably high when we consider the prices for farm products now being quoted on the other side of the line.

As to this last statement I might say that, while working near the international boundary this past summer, I was an eye witness of the fact that the settlers in Canadian territory were obtaining at the very lowest a third more for their produce than was obtainable by the American farmers across the line.

I have the honour to be, sir,
Your obedient servant,
JOHN VICARS, *D.L.S.*

No. 8.

REPORT OF F. W. WILKINS, D.T.S.

SURVEYS IN SOUTH-WESTERN ALBERTA.

MACLEOD, ALBERTA, 23rd October, 1895.

E. DEVILLE, Esq.,
Surveyor General,
Ottawa.

SIR,—I have the honour to submit the following report of my operations in the field this season, in accordance with instructions received from you, and dated the 6th May, 1895.

After arranging papers, etc., in the office at Ottawa and receiving necessary supplies of stationery, I left on the night of the 8th for the west. The work assigned me was in my old district, viz., Southern Alberta, in the vicinity of Macleod. I stopped over for a short time at my home in Norwood, to pick up instruments, books, etc., and then went on to Calgary, at which place I was to receive the horses and wagons, to be used in my work, and to make up my party.

Having made all necessary arrangements, got my horses and wagons, and purchased a supply of provisions, I started south by trail for the 4th base about thirty miles north of Macleod. As part of the work assigned me was to ascertain the cause of certain discrepancies of a rather serious character in the survey of the fifth meridian between the 3rd and 4th bases and in outlines adjacent thereto and to correct the same, and this being nearest to my starting point, I thought best to commence work here. I spent about two weeks at this, but the weather got so outrageously bad, I decided to go on at other work and again take this up after the flies (bull-dogs and sand-flies) had subsided.

This work lay entirely within the Porcupine hills, which should rather be called mountains, as their elevation above the prairie immediately to the east is from 1,500 to 1,700 feet. I learned that the azimuth of both the 3rd and 4th bases were correct, and also that the distance between them at the line between ranges 26 and 27 was nearly so. This, of course, made it certain that the known errors were caused by bad chaining, which seems not a little surprising when we take into account that a good deal of this work had already been gone over no less than three different times, and with as many independent measurements. Passing over for the present the interval above spoken of, I returned in the latter part of August and continued this same investigation until I had completed it. The method of correction used was that suggested in your letter of instructions issued on this matter some time ago, and embodied in the "list of corrections" to be made. The chaining was something awful—from two to three chains (132–198 feet) being not at all an uncommon error in one mile, and in all cases in defect. Thus it will be seen there is nothing surprising in the fact that former measurements made over one-quarter of a mile too much in the twenty-four miles between the bases.

The surface of the ground where these measurements were made is, of course, very hilly; but I cannot conceive how any one could make such chaining, unless no attention whatever was paid to the hilliness, and up hill and down dale chained in just the same way as if it were level ground, and no correction whatever allowed on hills which in many instances had grades or elevations of as much as 30°. I removed all the posts and destroyed the mounds and pits on thirty-three miles of these old lines, and placed the necessary land marks in their true positions. I also ran twenty-six miles of new

lines, putting in the necessary land marks, thus making good all the township outlines in the piece of country referred to. Whilst engaged at this work I was greatly hindered by bad weather. As to how hilly and difficult it is to get about in the Porcupine hills, some idea may be formed from the fact that a day's work with us often involved walking over these hills perhaps ten to twelve miles—fully one-half in brush and timber—and in the course of this distance climbing up elevations which would aggregate 4,000 feet, and going down the same before the day was ended. Without doing any work at all, such an amount of travel would have made this job no sinecure. I know that every one on the party was well pleased when the order was given to get out of the hills for good.

After first leaving the Porcupine hills, namely, early in June, as before mentioned, I went to township 6, range 28, west of the 4th meridian, which I subdivided. This is only one-half of a township, the north half being included in the Peigan Indian reserve The surface is of a rolling character except at the extreme north where a range of rather high hills is met with. The soil is good (clay loam, clay subsoil in general) and water in good supply. Large tracts of most excellent upland hay land exist in this township, and large quantities of hay are cut here every year by people, some of whom live as far away as Macleod. No wooded growth of any kind is found in the township, but at no great distance to the west, among the foot hills, good fencing and building timber exists in abundance as well as any quantity of wood for fuel. Excellent coal is now being mined about fifteen miles south-west of this township.

My next work consisted of the subdivision of township 5, range 27, west of the 4th meridian.

This township is nearly all good land, class 1, the soil being almost invariably clay loam supporting some of the finest upland hay I have ever seen. The Waterton river, a deep rapid stream of pure mountain water, about 175 feet in width, crosses the northern part of the township. A fringe of balm of Gilead trees and willow bushes, about five chains average width grows along the banks of this stream. The river itself is contained in a deep valley from one-half to three-fourths of a mile in width. This is a first-class township; no timber however is found in it other than that mentioned as growing along the river bank. The same remarks made about township 6, range 28, with respect to building and fencing timber and fuel hold good about this township. I next subdivided township 4, range 28, and after that township 4, range 29, west of the 4th meridian. Both of these townships are first-class, with splendid clay loam soil in general, though a little hilly and stony in places. The Waterton river runs northerly through the township first mentioned, and the north fork of the Waterton (a fine stream about sixty feet wide) runs from west to east through both. Fine hay land and abundant water in rivers, lakelets and springs are found everywhere. Building and fencing timber and wood for fuel exist in abundance in the foot hills at no great distance to the west. A very considerable quantity of wood suitable for fuel exists along both the streams mentioned. Coal has also been found in township 4, range 28, which the settlers say is excellent for heating purposes. Quite a number of settlers are located in both of these townships and are doing well, to judge from the amount of stock they own. I next subdivided township 4, in range 27, west of the 4th meridian. This is also a first-class township with clay loam soil in general. This township is not a full one, the Belly river forming its eastern boundary, and east of the Belly river is the Blood Indian reserve. Abundant water and grass are found throughout the township, which with township 5 to the north is included in the Cochrane cattle range. In my opinion this is the best cattle range in the North-west Territories. No settlers are found in either townships 4 or 5 just mentioned with the exception of two cattle men who have newly located on the north side of the Waterton river in township 5. I had also to run some of the township outlines in doing this work. There was also a considerable amount of traversing of rivers and lakes to be done, involving a good deal of chopping of brush, and this, together with a great deal of hindrance through wet weather, kept me at this part of my work much longer than I had expected. About this time I received a letter of instructions about certain descrepancies in the survey of the Mounted Police reserve at Stand-off, so after getting through with the work at

the Cochrane ranch, I went down to Stand-off and ran out the Police reserve at that point. I now went on to the Porcupine hills, and as before related completed the work on the 5th meridian begun in the first part of the season. From this I now went to township 7, range 3, west of the 5th meridian at the Crownest pass, and there ran a number of section lines and traversed a part of the middle fork of the Oldman river. This work proved very slow and labourious by reason of a good deal of the worst brush I believe I ever encountered, and also through the lines running so much on the mountain sides.

While here too we had much bad weather, so that altogether we got on but very slowly indeed.

Some very nice patches of land existed in the "pass" in this township, with of course an unlimited supply of good timber for every purpose, plenty of grass also on the hill sides, and some good hay ground; and as to scenery and fish and small game—well, there is nothing in the Bow pass that can equal it.

My next work lay in township 8, range 3, immediately to the north of the last mentioned township. Here I ran a few miles of section lines so as to enable some settlers, who were already in the township, to locate themselves. These people are mostly in the valley of Rock creek, a beautiful stream about 10 feet wide and a foot deep, which takes its rise just to the west in the Livingstone range of the Rocky Mountains. Some splendid locations are formed in this valley, with every convenience in the way of wood, water, building and fencing timber, grazing and hay lands. Coal is found in the next township to the south—a fact I forgot to mention when speaking of that township a few lines back—of fair quality, in a two foot seam at a point about the middle of the township. Good crops of the various grains and roots were raised in the locality this year, winter wheat doing especially well from the "pass" to the vicinity of Pincher creek. My next work was to run out portions of townships 8, 9 and 10 range 2, where some few settlers had located on unsurveyed land.

As the season was now getting on I determined to survey only such parts of these townships as were urgently needed, otherwise I would perhaps be greatly hindered by bad weather in locating the various water reserves on the Walrond ranch which I had but recently received instructions to do, so that the amount of work done by me in each of the three last mentioned townships was not large. In accordance with the above I therefore ran some few miles of section lines in these townships and also transversed quite a piece of the north fork of the Oldman river in township 10, range 2. The surface of these townships is composed of about one-half very hilly ground (ridges of soft sandstone rock) and the other half rolling land. The soil is largely first-class clay loam with some gravelly and stony tracts. Water is in good supply in lovely springs which burst from the hill sides, and taking it altogether this is a fine stock farming district. I now turned my attention to the locating of the reservations for water on the Walrond ranch as instructed, and at the date of writing am still busily engaged at this work.

Speaking in general of the whole district of country over which my work extended this season, I have nothing but good to say of it. In those parts where agriculture pure and simple was carried on the reward to the husbandman was all one could desire.

In the vicinity of Pincher creek, which represents most largely the purely agricultural industry, most excellent crops of wheat, oats, barley and rye, as well as potatoes, turnips and other roots were raised this year. Quite a number of people last year sowed winter wheat in this district, and notably among them A. M. Morden, J. P., and Charles Kettles, Esq., of Pincher creek. Large returns were realized from this crop (as much as 50 bushels to the acre) of grain of splendid quality, so that for my part at least I am quite convinced that south-western Alberta is the most valuable part of the North-west for unmixed farming, while as to the raising of all kinds of stock it has long been acknowledged as being well in the lead. The crop of calves in this part this season has been very large, and as all stock which I have seen (save some two-year-old steers brought up from Ontario by the Walrond ranch company, which take some time to adapt themselves to the changed conditions) is looking well and in good con-

dition, and as there is an abundance of dried grass (natural hay) for feed during the winter, this ought to be a very prosperous year among the cattlemen.

There is a ready market up here for beef at good prices, and apparently no limit, as two or three large buyers take all they can get. I believe the beef industry can be made to pay a general return on the investment of from 12 to 20 per cent, if managed on business principles.

That in many instances it has not proven remunerative in the past is the case I believe, but the management in my opinion is to blame wholly for this.

The weather was backward in the early part of the growing season, and this was followed by a remarkably cool summer. The fall season from the 19th of September up to the present date has been the finest and most delightful I have ever experienced.

In general, rain was fairly abundant throughout the season—in July a little more so than was altogether agreeable—but latterly we have had none to mention, and to all appearances winter seems a long way off yet.

I have the honour to be, sir,
Your obedient servant,

FRED. W. WILKINS, *D.T.S.*

No. 9.

EXAMINATION PAPERS FOR DOMINION LAND SURVEYORS.

PLANE GEOMETRY.

Time, 3 hours.

	Marks.
1. Divide a straight line into two such parts that the rectangle of the whole line and one of the parts is equal to the square on the other part.	14
2. Prove that the sum of the interior angles of any polygon equals twice as many right angles as the figure has sides, less four.	14
3. Express the distance between the inscribed and described circles of a triangle in terms of the radii.	16
4. The rectangle contained by the diagonals of a quadrilateral inscribed in a circle is equal to the sum of the rectangles of the opposite sides.	14
5. If an angle of a triangle be bisected by a line cutting the opposite side then the rectangle of the sides containing the angle is equal to the rectangle of the segments of the remaining side, together with the square on the line bisecting the angle.	14
6. The square of the side of an equilateral triangle is three times the square of the radius of the circumscribing circle.	14
7. Find a square equal to three, five or any number of squares.	14

SOLID GEOMETRY.

Time, 3 hours.

	Marks.
1. Prove that three planes cannot enclose a solid, but that four may.	20
2. The plane angles which contain any solid angle are together less than four right angles.	20
3. Draw a straight line perpendicular to a plane from a given point above it.	20
4. If two parallel planes be cut by another plane, their common sections with it are parallel.	20
5. Find the radius, volume and surface of the sphere circumscribing a regular tetrahedron, whose edge is m.	20
6. A mound in the form of a frustum of a pyramid, having a base of five feet and top of one foot side, height two and a half feet, is built from the earth of four equal pits each three feet square. How deep must the pits be?	20
7. Supposing the specific gravity of ice to be ·90 and of sea-water 1.10, to what depth will an ice-berg in the form of a right cone, height 150 feet, base 70 feet, be submerged, when floating upright?	30

SPHERICAL TRIGONOMETRY.

Time, 3 hours.

	Marks.
1. Deduce one of Napier's analogies.	20
2. Deduce the relation,— $\text{Sin } a \text{ Cos B} = \text{Sin } c \text{ Con } b - \text{Cos } c \text{ Sin } b \text{ Cos A}.$	20
3. If A B C be a spherical triangle whose sides are quadrants, and P any point within it, show that $\text{Cos}^2 \text{ A P} + \text{Cos}^2 \text{ B P} + \text{Cos}^2 \text{ C P} = 1.$	20
4. $\text{Cos } a = \text{Cos } b \text{ Cos } c + \text{Sin } b \text{ Sin } c \text{ Cos A}.$ Convert this to the polar triangle.	15
5. Give formula for solving a triangle completely, when two sides and the included angle are given.	15
6. Given the three sides of a triangle, deduce formula for finding an angle.	20
7. Show that area of a spherical triangle is equal to the spherical excess.	20
8. $a = 50°$, $b = 60°$, $c = 70°$, find A.	20

DIVIDING AND LAYING OFF OF LAND.

Time, 3 hours.

Marks.

1. In a quadrilateral field, AB = 5 chains, AD = 12 chains, CB = 15 chains, CD = 15 chains, and the diagonal BD = 13 chains. It is required to divide the field into equal parts by a straight line parallel to AB. What is the length of the dividing line? — 25
2. A parcel of land ABCD is bounded on one side by a stream which sweeps past it in a curve of radius 3,000 ft. AD = 20 chains, AB = 40 chains, BC = 35 chains, and the angles A and B are right angles. Required to divide the parcel into two equal parts by a line parallel to AD. What is the length of the dividing line? — 25
3. Given a quadrilateral whose sides are a, b, c, d, and one of the angles A, required to divide the area into two parts in the ratio of m to n by a line from the angle A. Find the parts into which the angle A is divided. — 25
4. In a township of theoretical dimensions (Third System), what is the azimuth of the line from the southeast angle bisecting the township. — 25

MEASUREMENT OF AREAS.

Time, 3 hours.

Marks.

1. Required, by the method of latitudes and departures, the area of a field, of which the following are fieldnotes :— — 35

Station.	Bearing.	Distance.
1	N. 35° E.	6·49
2	S. 56° 15′ E.	14·15
3	S. 34° W.	5·10
4	N. 56° W.	5·84
5	S. 29° 30′ W.	2·52
6	N. 48° 15′ W.	8·73

2. Explain what is meant by balancing a survey, and give example from above data. — 20
3. In the above, supposing the bearing of one line and the length of another to be missing, show how to supply the omissions from the other data. — 25
4. The offsets from a traverse line to a stream are :— — 20

Distance. Chains.	Offset. Chains.
0·00	·96
1·19	1·45
2·05	1·32
3·50	1·63
4·75	1·80
6·10	1·25
8·00	·60

Find the area of the tract between the traverse line and the stream.

DESCRIPTIONS.

Time, 3 hours.

Marks.

1. A piece of land containing 30 acres is to be sold out of the N. W. corner of the N. E. ¼ of Sec. 15, Tp. 33, Rge. 1 W. of 3rd Mn. The sides are to be equal, and the S. and E. boundaries parallel to the section lines, and access to it is provided for by the sale also of a roadway 20 feet wide, extending from the N E. corner of the 30 acres along the nearest section line to the nearest road allowance. Prepare description for the conveyance. — 30
2. The owner of a ¼ Sec. sells the northerly 70 acres thereof. The portion sold is to be parted off by a line drawn parallel to the northern boundary of the ¼ section. Required a description for deed of sale. — 20

3. A creek running easterly through the S. W. $\frac{1}{4}$ Sec. 3, Tp. 2, Rge. 1 W. P. M., divides it into two parts. The stream crosses the west line of the quarter section at 12.25 chains and the east line at 15.30 chains north of the road allowance. All the land south of the creek is to be sold. Required a description by metes and bounds for conveyance of the land.	20
4. A owns the S. E. $\frac{1}{4}$ of Sec. 30, Tp. 56, Rge. 16 W. 4th Mn., and sells to B one-half of the land. The division line is to be drawn northerly from a point 18 chains westerly along the road allowance from the S. E. corner of the section. Prepare a description for the conveyancer's use.	20
5. Draw up a settler's statutory declaration of occupancy.	10

ASTRONOMY (1ST PAPER).

Time, 3 hours.

	Marks.
1. Define mean, apparent, and sidereal time; also right ascension, declination, and parallax.	15
2. What is the sidereal time of sunrise on January 1st, 1882, for a place whose latitude is 45° 25′ N., longitude 75° W.?	17
3. The observed altitude of Polaris at lower transit on May 20th, 1882, was 43° 17′; what is the latitude of the place?	15
4. At mean noon May 1st, 1882, a sidereal chronometer having a losing rate of two seconds per day is slow (in sidereal time) five hours, seventeen minutes and forty-one seconds. When will it show the correct mean time?	18
5. What is the azimuth of Polaris at western elongation on March 20th, 1882, at a place whose latitude is 50° 10′, longitude 97° W., and what is the local mean time of elongation?	18
6. What is equation of time, how is it applied, and in what observations has a surveyor occasion to use it? In what kind of time is the equation of time expressed?	17

ASTRONOMY (2nd paper).

Time, 3 hours.

	Marks.
7. On the Fourth Base Line, Range 15 W. of 3rd Meridian, June 13th, 1882, the observed altitude of the sun's lower limb was 32° 15′. What was the azimuth of the sun, and time of observation?	40
8. On February 15th, 1882, in latitude 43° 20′ N., longitude 80° 20′ W., what is the azimuth of Polaris when its hour angle is 4 hours?	20
9. On June 10th, 1882, the altitude of the sun's lower limb was 72° 13′ 30″ at transit; longitude of place 110° W. What is the latitude?	20
10. The hour angle of α Lyra (Vega) when on the prime vertical is 2h. 30m.; what is the latitude of the place?	20

PART III

IRRIGATION

DEPARTMENT OF THE INTERIOR,
TOPOGRAPHICAL SURVEYS BRANCH, OTTAWA, 15th March, 1895.

E. DEVILLE, Esq.,
Surveyor General, Department of the Interior,
Ottawa.

SIR,—I have the honour to forward herewith a general report upon the subject of irrigation in the North-west Territories, and the Canadian irrigation surveys performed during the past year.

The report has, for convenience of reference, been divided into three parts.

Part I. contains a brief description of the boundaries, soil, climatology and hydrography of the arid portion of the North-west Territories, together with a reference to the conditions which have led to the adoption of the principle of irrigation for the reclamation of this arid area, and also embraces a short account of the enactments by the Dominion Parliament and the North-west Legislative Assembly regarding the use of the available water supply for irrigation.

Part II. is devoted to a discussion of the system under which the Canadian irrigation surveys are being performed, and the results obtained from these surveys during the past year.

Part III. contains a manual of information and statistics regarding irrigation, and is largely composed of extracts from text books or reports upon this subject. This information is given with the hope that the experience of others may prove of value the residents of the arid portions of our Territories to whom the subject of irrigation new and little understood.

I have the honour to be, sir,
Your obedient servant,

J. S. DENNIS,
Chief Inspector of Surveys.

PART I.

IRRIGATION IN CANADA.

HISTORY.

To the large majority of the people of Canada the question of irrigation is entirely new and novel, and the results obtainable through assisting agriculture by the artificial application of water are little understood and poorly appreciated.

This condition is readily understood when it is remembered that in the eastern portion of the Dominion, comprising the older provinces, the climatic conditions are such that it has never been necessary to augment the rainfall by the artificial application of water, in fact the energies of the agricultural population in this portion of the Dominion have been largely devoted to the construction of drains and ditches necessary to run off the surplus water, rather than to bringing it to the cultivated land, and legislation regarding water has been in the form of drainage Acts and matters connected herewith.

In British Columbia, the most westerly province of the Dominion, the early settlement and cultivation of the valleys in the interior proved the necessity for the application of water, through irrigation, to make agriculture successful, and for many years the principle has been in active operation there, notably in the Kamloops and Okanagan districts. The experience which had come to the early residents of that province through the construction of ditches and flumes for the conveyance of water to aid mining operations, proved of value when systems carrying water for irrigation were undertaken, and in some instances the works originally constructed for the first mentioned purpose are now utilized for the latter. In British Columbia, however, the ditches are short and of small capacity, and the total area under irrigation does not exceed 50,000 acres. The laws regarding the use of water in British Columbia for irrigation are contained in the Land Act, and, while the provisions as far as they go are clear and definite, the enactments are of a very incomplete character, and will require considerable additions and amendments as soon as the principle of irrigation comes into more common use.

Through the purchase, in 1870, of the rights of the Hudson's Bay Company to that portion of British North America, then known as Rupert's Land, the Dominion of Canada became possessed of a vast territory offering great variety of topographical and climatic conditions, and it is with the portion of these territories, which experience has since proved requires irrigation, that this report more particularly deals.

The rapid settlement which followed the opening up of the newly acquired territory was for some years confined to the more easterly portion, which in 1873 had been erected into the province of Manitoba, and there the rainfall was found sufficient to ensure bountiful harvests.

When the construction of the Canadian Pacific Railway was, in 1882 and 1883, pushed west across the open or plains portion of the territory, settlement followed close upon its heels, and by the time the railway line had reached the Rocky Mountains numerous settlements had been established along the route.

In 1882 the territories lying west and north of the province of Manitoba were created provisional districts called Assiniboia, Alberta, Saskatchewan and Athabasca. The first named district lay immediately to the west of Manitoba, and Alberta comprised the portion of the territories lying west of Assiniboia and extended to the Rocky Mountains; both of these districts were traversed by the newly constructed railway line Saskatchewan and Athabasca comprised the more northerly portions of the territories

The settlement which followed the construction of the Canadian Pacific Railway was divided into two classes; that in the eastern portion of Assiniboia was mainly composed of farmers proper who were engaged in the growth of cereals, while the more westerly settlements in Western Assiniboia and Southern Alberta were devoted to stock-raising. For some years stock-raising was the chief occupation of the population in the last mentioned districts, but by degrees small amounts of cultivation were undertaken and the growth of cereals attempted. In 1884 this portion of the country was blessed with a very bountiful rainfall and the necessity for irrigation did not present itself, and, although the two succeeding years were dry, the swamps and streams retained so much of the excessive moisture of 1884 that the residents were not aroused to the necessity for the artificial application of water, in fact as they had largely come from the humid portions of the Dominion or from Great Britain they were unacquainted with the principles of irrigation, or the results to be accomplished thereby, and the possibility of assisting the growth of crops by this means was only realized after continued seasons of drought, and after seeing the results obtained by the construction of a few small irrigation systems by settlers who had come from countries where irrigation was practised.

The meteorological data regarding this portion of the Territories, obtainable at that time was very vague and fragmentary; the government meteorological stations had only just been established, and the observations which had been made by surveyors, explorers, or other transient visitors were of too disconnected a character, and covered too short an interval, to be of use as a guide to the existing conditions. The settlers therefore fondly hoped that the dry seasons were exceptional, and confidently looked for a return of the conditions which had prevailed in 1884. But the ever recurring dry years has at last convinced the most skeptical that they live in an arid region, and that to irrigation alone they must look for the means of making a livelihood.

The meteorological data now available, and the topographical and general information which we have, enables us to designate, with a fair degree of accuracy, the limits of the arid portions of our Territories, and as an introduction to the general question of the attempt to reclaim the lands therein, by the means of irrigation, the arid portion is described somewhat in detail.

ARID REGION.

The portion of the North-west Territories which may be said to lie within the arid region may be described as follows:—It is bounded on the south by the International Boundary, on the east and north by a line commencing at the intersection of the 102nd parallel of west longitude with the International Boundary, and running from thence north-westerly to latitude 51° 30′, and thence west to the Rocky Mountains; and on the west by the Rocky Mountains. This portion of the Territories contains about 80,000 square miles or upwards of 50,000,000 acres.

There is a portion of the Territories lying to the east of the arid region, as above described, and embracing a belt of country extending into South-western Manitoba, which may be designated as the sub-humid region, where there is sufficient rainfall to warrant the planting of crops, and where agriculture during most seasons is successful, but where dry seasons are experienced every few years and the crops are cut off owing to insufficient rainfall. In this region irrigation will in time be practised to a greater or less extent to counteract the baneful results of these dry seasons, but at present the subject is just beginning to attract notice.

The eastern portion of the arid region lying between its eastern limit and the Missouri Coteau is largely a level plain, broken by some hills as we approach the Coteau, and by the valleys of the Souris River and Moose Jaw Creek, the Qu'Appelle River and Last Mountain Lake. After ascending the Coteau the country is a high, open plateau gradually rising toward the west, the elevation of the easterly portion being about 1,600 feet above sea level, and of the most westerly, adjoining the foothills of the Rocky Mountains, about 3,500 feet above the sea.

This vast open plain is broken along its southern boundary, as we proceed west, first by the Wood Mountains and then by the Cypress Hills, both of which cover a con-

siderable area, and rise to a good elevation above the surrounding country, and are in parts thickly wooded.

As we approach the western limit of the region, the country becomes more or less rough and broken in places by the foothills.

SOIL.

The soil of the arid region is, as a whole, of an exceptionally fertile character. In places sandy tracts and districts broken by sand hills and high gravelly ridges are met, but in general the soil consists of a rich alluvial loam varying in depth, and overlying a subsoil of clay and gravel.

In the Wood Mountains and Cypress Hills districts the country is more or less broken by ravines, and heavily timbered in places, but the soil is good and the native grasses are both luxuriant in growth and nutritive in character.

In the valleys along the streams the bottom lands are of the richest kind, consisting of heavy black loam of great depth. The vegetation in the eastern and central portions is sparse in places, but as we approach the western limit the native grasses become thick and luxuriant, and their nutritive qualities have justly given Alberta a reputation for producing as fine beef as is marketed in the world.

HYDROGRAPHY OF THE ARID REGION.

EASTERN DISTRICT.

In that portion of the arid region lying east of longitude 107° the supply of water, available for irrigation, is very limited. The only stream of importance is the Qu'Appelle River, which flows in such a deep valley and has so little fall, that diversion of its waters, except upon the bottom lands, will probably be found beyond the limits of financial possibility, and at the best the quantity of water obtainable from this source would be small, unless some steps are taken to augment the flow by the diversion of water into this stream, from the South Saskatchewan River near the Elbow, in the manner mentioned further on.

The Souris River, the Moose Jaw Creek, and the Wood Mountain River are small streams with all the characteristics of prairie drainage channels, and the probable area which can be reclaimed by the water from these sources is very limited.

It is probable that the present water supply in the district can be largely increased by the construction of storage reservoirs on these streams, and along the eastern slope of the Missouri Coteau, but even with this the reclamation of any extensive areas cannot be looked for.

There is a large body of water contained in the Old Wives Lakes, situated about the centre of the western limit of this portion of the arid region, but unfortunately it is so alkaline as to be useless for irrigation. However, as these lakes are at an elevation which permits of their being drained into Moose Jaw Creek, the time will doubtless come when it will be advisable to consider the possibility of running off the salt water, and utilizing this large natural basin for storage of the flood waters brought down by Wood Mountain River and other drainage channels, until they are needed for early season irrigation. Of course an experiment of this kind is dependent upon the practicability of washing out the basin sufficiently to permit of the storage of water until needed, without becoming impregnated with alkaline salts to such an extent as to be useless for irrigation, and further upon the result of the investigations which will have to be made to prove that the run-off from the catchment basin tributary to these lakes is sufficient to fill them if properly collected.

The only method of supplying sufficient water to reclaim any portion of the large areas of fine soil contained in the plains in the vicinity of Moose Jaw and Regina is by diversion of the waters of the South Saskatchewan River, by the construction of a canal heading in this stream, and then following the south bank of the Qu'Appelle valley

until sufficient elevation is reached to bring the water out on to the bench land or plains.

The diversion of the waters of the South Saskatchewan into the Qu'Appelle valley is not a new idea. As far back as 1859, a scheme to accomplish this was proposed by Professor Henry Y. Hind, but his object was to create a navigation channel through the Qu'Appelle valley. Professor Hind found that the highest point in the valley was about 11½ miles east of the Elbow of the South Saskatchewan, which attained an elevation of 85 feet above summer flow in that stream; he also states that the Qu'Appelle valley has a fall of about one foot in a mile, and that the shallowest portion of the valley is about 120 feet below the level of the surrounding prairie. It is presumed that these elevations are from barometrical measurements, but they are probably sufficiently accurate for use in estimating the possibility of constructing an irrigation canal on the above mentioned location.

In the absence of any data regarding the fall in the South Saskatchewan River, it is impossible to say how far up the stream would have to be tapped by the canal to reach the height of land mentioned, but judging from an examination of the river, in this part of its length, made by the writer some years ago, the fall in the stream is very small, and the distance from the head of the valley of the Qu'Appelle to headgates of canal would be at least thirty miles. Having reached the height of land, the problem of carrying the water along the south slope of the valley until the bench level can be reached has to be solved. If the fall in the valley is as small as stated by Prof. Hind, it is extremely doubtful whether the prairie or bench land could be reached with a canal running along the south slope of the valley, for it would require all this fall to secure necessary flow in the canal. However, these are all questions which can only be settled, or intelligently discussed, after the necessary surveys with accompanying careful levels to determine the groundwork data have been made, and in view of the important bearing which this question will have upon the future prospects of the district, it is desirable that this investigation should be made at an early date.

CENTRAL DISTRICT.

The central portion of the arid region comprises that part lying between longitude 107° and 110° 30′. In this district the only stream of any importance is the South Saskatchewan River, which runs through the district from west to east near the northerly limit. This river is a stream of large size, navigable with light draught boats at certain seasons, but its value as a source of supply for irrigation purposes is largely discounted by the fact that it flows at an elevation many hundred feet below the surrounding country, and its fall is so small that any attempt to divert its waters to the bench or prairie level would be an undertaking of considerable magnitude, and it is probable that for many years the only irrigation from this source will be confined to the immediate bottom lands along the stream, which are large and of excellent soil, and well adapted for cultivation in this way.

In the southerly portion of this district, which is broken by the Cypress Hills, there are a number of small streams heading in these hills and flowing north, south and east. These will supply water for small systems designed to reclaim areas in their immediate vicinity, but until reservoirs are constructed, at some of the many favourable sites for structures of this kind afforded by the ravines on the north slope of the Cypress Hills, the reclamation of arable areas will probably be confined to the small areas susceptible of irrigation from these streams.

There are some lakes of good size situated in the Cypress Hills, which can probably be utilized to augment the flow of the streams heading in the hills, but as yet nothing has been done towards examining these lakes to determine their volume or adaptability for that purpose.

The streams, which head in the hills, carry large volumes of water during the period of melting snow, which falls to a considerable depth in the hills, but during the latter part of the season many of them become dry or have water only in parts, and without some means of retaining the spring run-off until the irrigation season they are very precarious sources of supply for irrigation systems. But, as the country lying to

the immediate north of the Cypress Hills probably affords the best opportunity, owing to the existing climatic conditions as illustrated further on, for agricultural and horticultural development of any portion of the arid region, there is little doubt that before long steps will be taken to thoroughly conserve the available water supply.

WESTERN DISTRICT.

The western district of the arid region comprises the country between longitude 110° 30′ and the Rocky Mountains, and is watered by nine streams, viz.: The Red Deer River, the Elbow River, the Bow River, the Highwood River, the Belly River, the Old Man River, the St. Mary River, the Waterton River and the South Saskatchewan River; in addition to these there are a large number of smaller streams tributaries of the above.

The main rivers are all mountain streams in the sense that they head in, or are supplied from, the eastern slope of the Rocky Mountains and flow east, and the water in all, except during periods of flood or high water, carries very little silt, and is comparatively cold.

Almost immediately after leaving the foothills of the Rocky Mountains most of these rivers acquire many of the characteristics of prairie streams, flowing for the most part in deep valleys, with extensive bottom lands and sparsely wooded shores, but with few exceptions they run in well defined channels with bottoms and banks largely composed of gravel.

Like most run-off channels for mountain catchment areas, these streams are subject to sudden spring and summer freshets, and the volume of their flood and low water discharges exhibit great extremes.

The fall in the streams, particularly in the upper portion of their lengths, is considerable, as will be noted from the schedule of slopes given, and although, as has been stated, they flow in deep valleys, many favourable opportunities are afforded for simple and inexpensive diversion of their waters at points high up on the streams, so that there is no doubt the high bench and prairie areas can be reached by reclamation works taking water therefrom.

The many small creeks in the district, although spoken of as tributaries of the above rivers, are an important source of water supply, and afford exceedingly favourable opportunities for the diversion of water for irrigation of individual holdings.

The characteristics of the different rivers and smaller streams are discussed fully in the section of this report relating to the irrigation surveys of the past year; it is therefore not necessary here to go further into the question of the water supply in this part of the arid region, except to say that the district is well supplied with water, and that by utilizing the many favourable sites for the storage of the flood discharge of the streams, which otherwise goes to waste, a very considerable percentage of the land in this district can be reclaimed.

LAKES AND LAKE BEDS IN THE ARID REGION.

Throughout the arid region many lakes are found, notably Last Mountain and Old Wives Lakes in the eastern district, Waterton Lake in the western district, and others of less importance in this, and also in the central district. In a number of cases the water in these lakes is too alkaline to be of any use for domestic or irrigation purposes, and in the majority of instances, where the water is good, the lakes are at a level which will not permit of the diversion of their waters to adjacent lands. It is probable that in many cases the water can be raised by construction of dams and the collection of storm waters, so as to be useful in augmenting the supply in streams, but under existing conditions the water supply in lakes, outside the mountainous portion of the region, cannot be counted upon as a source of supply for irrigation.

In speaking of these lakes it will be of interest to note that during the past nine years they have steadily decreased in size until in many instances they have entirely dried up, and where ten years ago there was a large and important sheet of water many feet in depth we now find a perfectly dry bed, devoid of vegetation and containing cracks of great width and depth.

Unfortunately our meteorological records in the district only cover the past ten years during which this change has been going on, and are therefore of very little value as a guide in determining whether the present condition is the outcome of a defined cycle of dry seasons, or the result of some gradual but permanent change which is taking place in the climatology of the region. There is no doubt, judging from the experience of old residents, that the whole North-west Territories are subject to cycles of dry and wet years, and it is stated by some of the natives and these old residents that the large lakes which have dried up during the past nine years, were in a similar condition within their recollection, and then filled up again, and they confidently assert that in a few years these dry beds will be again covered with many feet of water. A close inspection of the precipitation at the different meteorological stations throughout the arid region, as shown by the schedules further on, would seem to cast a grave doubt upon the fulfilment of the above prediction, for it will be noted that beginning with 1884, when these lakes were all full, the precipitation decreased for some years and then increased materially, until in 1890-92 a largely increased precipitation over previous years was reached, and yet the lakes have steadily decreased in size until most of the small ones, and many of the largest, have become perfectly dry.

PRECIPITATION.

The precipitation in the arid region is largely rain, for the snow seldom falls to a great depth, except in the mountains, and is of a very light and dry character. Unfortunately the meteorological data procurable from the Government stations, since their establishment, do not cover a sufficient period of time to enable us to speak with any degree of certainty on this very important point, but the information procurable from this source has been assembled, and the table which follows illustrates the existing conditions as far as known.

CLIMATE OF WESTERN ASSINIBOIA AND SOUTHERN ALBERTA.

STATEMENT compiled from Dominion Meteorological Reports showing the Mean Monthly and the Mean Annual Precipitation* for periods embracing several years.

Description of Stations.				Length of Record.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Latitude.	Longitude.	Elevation.	Place.														
		Ft.		Years													Inch.
51° 02′	114° 04′	3401	Calgary	9¾	0·50	0·55	0·63	0·63	1·70	1·97	2 25	1·58	0·86	0·48	0·55	0·68	12·38
50° 52′	113° 03′	2928	Gleichen	Part of 5	1·13	0·72	0·61	0·92	0·70	1·69	2·18	0·87	0·33	0·00	0·16	0·70	10·01
50° 02′	110° 40′	2139	Medicine Hat	11	0·45	0·50	0·58	0·62	1·17	2·79	1·73	1·31	0·88	0·45	0·51	0·52	11·51
49° 55′	109° 28′	2470	Maple Creek	5⅝	0·98	0·60	0·44	0·35	1·14	3·54	1 23	0·82	0·87	0·21	0·25	0 72	11·15
50° 17′	107° 47′	2400	Swift Current	6⅝	0·68	0·87	0·79	1·49	1·72	3·05	2·02	1·82	1·15	1·16	0·81	0·95	16·51
50° 29′	106° 39′	2261	Chaplin	11	0·52	0·73	0·34	0·62	0·48	0·88	0·56	0·48	0·59	0·56	0·27	0·41	6·44
50° 27′	104° 35′	1885	Regina	11⅝	0.36	0·39	0·53	0·76	0·6	1·97	0·85	0·73	0·63	0·67	0·35	0·38	8·38

* Snow reduced to rain included. Mean for arid region, 10·91 inches.

In discussing the data regarding precipitation given in the above table, it will be found advantageous to continue the subdivision of the arid region into eastern, central and western districts, and to refer briefly to the conditions existing in each, beginning with the

EASTERN DISTRICT.

The two stations at which records have been kept, in the eastern district, are Regina and Chaplin, both situated on the Canadian Pacific Railway at the eastern and western limits of the district respectively; the record at Regina extending over 11⅝ years, and at Chaplin, 11 years.

The conditions existing at these stations may be taken as fairly representative of the eastern district. From the record we find that the mean annual precipitation at Regina is 8·38 inches, and at Chaplin, 6·44 inches, giving a mean for the district of 7·41 inches. The greatest annual precipitation since 1883 at Regina was 14·82 inches during 1891, and at Chaplin, 18·94 inches during 1884. These figures make it apparent that agriculture in this district, unaided by irrigation, must be a very precarious undertaking, it being generally recognized that from 16 to 25 inches of annual precipitation are needed to mature crops grown by ordinary methods of agriculture.

The mean annual precipitation in the eastern district as given above is 6·42 inches less than in the central district, and 4·89 inches less than in the western district of the arid region.

CENTRAL DISTRICT.

The meteorological stations in the central district are situated at Swift Current and Maple Creek, both on the Canadian Pacific Railway, and both about equally distant from the east and west limits of the district. The annual precipitation at Swift Current, as given above, is 16·51 inches, and at Maple Creek, 11·15 inches, giving a mean for the central district of 13·83 inches. It is probable that the mean obtained from the observations at these points is not a fair basis upon which to judge the precipitation of the central district, for, as both these stations are situated in the immediate vicinity of the Cypress Hills, the precipitation recorded is no doubt in excess of that which would be found at a station in the northern or plains portion of the district.

It is worthy of note that the mean annual precipitation at Swift Current is very much greater than at any other point in the arid region where meteorological observations have been taken, and further that this precipitation is largely rainfall during the months of June, July and August when it is most needed for growing crops, and yet the experience of those who have attempted agriculture under ordinary conditions at this point has been very unsatisfactory. In the absence of statistics regarding evaporation it is difficult to account for this condition of affairs, but it seems probable that if the ordinary precipitation is augmented by a reasonable amount of irrigation, the results obtainable both from agriculture and horticulture would be most encouraging, and this desirable result seems the more certain in view of the fact that the waters of the Swift Current Creek, which is the most important stream in the district next to the South Saskatchewan River, can probably be economically stored so as to serve a large area of land in the immediate vicinity, and that the climate at this point, as disclosed by the temperature schedules given further on, is most favourable.

WESTERN DISTRICT.

The observations for precipitation in the western district have been taken at three points, viz., Medicine Hat, Gleichen and Calgary. These are all stations on the Canadian Pacific Railway line, the first being situated on the South Saskatchewan River, near the extreme eastern limit of the district, and the other two on the Bow River, in the north-western part of the district.

It is evident from an inspection of the map, that observations at these points will not give a fair estimate of the mean annual precipitation for the entire western district, as the conditions may be, and doubtless are, very different at some of the important points in the southern and western parts of the district; however, in the absence of any reliable information from these points, we must base the present discussion on the statistics given above.

The annual precipitation at Medicine Hat is 11·51 inches, at Gleichen 10·01 inches, and at Calgary 12·38 inches, giving a mean for the district of 11·30 inches.

A consideration of these figures makes it apparent that this mean can only apply to the open or prairie portion of the district, and that the great rainfall and snowfall upon the Rocky Mountains, which are the sources from whence many of the large streams draw their water supply, must be largely in excess of the figures given. It is also evident that, before attempting to establish any relation between the precipitation and run-off of the large catchment basins which are to supply the water for the future reclamation of large areas in this part of the arid region, careful precipitation and evaporation observations must be made within the influences of this mountain range and the immediate foothills bordering it on the east.

For purposes of comparison the annual precipitation is given hereunder in certain states and territories of the United States where irrigation is resorted to as an aid to agriculture.

STATEMENT showing mean Annual Precipitation in certain States and Territories of the United States.

FROM U. S. SIGNAL SERVICE REPORTS.

State or Territory.	Mean Annual Precipitation.
Arizona	12·42 inches.
California	22·56 do
Montana	12·61 do
New Mexico	13·62 do
Nevada	10·64 do
Utah	10·32 do

From a comparison of the foregoing table with the figures previously quoted it would seem that our arid region has about the same precipitation as Utah and Nevada, and falls considerably below the other states and territories, where irrigation is recognized as the only means of procuring a crop. If the rainfall which we have, small as it is, could be controlled so as to fall during the period of growing crops, much of the necessity for irrigation would be done away with, but an inspection of the tables shows that what does come is precipitated at a season when it is of little benefit, and it therefore becomes necessary to divert it from its drainage channels, and apply it artificially through irrigation at a time when it will do the most good.

TEMPERATURE.

The conditions necessary to a successful agricultural country are good soil, sufficient rainfall to mature and aid the growing crops, or the application of this moisture through irrigation, and a favourable climate.

The first two conditions, as they exist in our arid region, have already been discussed; it is now proposed to devote some space to the latter condition, more especially from the standpoint of temperature, and dealing with the region under the same subdivision into eastern, central and western districts, as has been adopted in the remarks upon precipitation.

As a basis for these remarks the following statements showing mean monthly and annual temperatures at meteorological stations throughout the arid region, and in certain states and territories in the United States where irrigation is the recognized medium, through which the required moisture can be provided to make agriculture and horticulture possible, are given.

Department of the Interior.

STATEMENT showing the mean Annual Temperature in certain States and Territories of the United States.

FROM U. S. SIGNAL SERVICE REPORTS.

State or Territory.	Mean Annual Temperature.
	°
Arizona	64·16
California	60·71
Colorado	44·82
Montana	42·40
New Mexico	55·95
Nevada	50·32
Utah	50·10

CLIMATE OF WESTERN ASSINIBOIA AND SOUTHERN ALBERTA.

STATEMENT compiled from Dominion Meteorological Reports showing the Mean Monthly and the Mean Annual Temperature.

DESCRIPTION OF STATIONS.				Length of Records.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Latitude.	Longitude	Elevation.	Place.	Years.	°	°	°	°	°	°	°	°	°	°	°	°	°
51° 02′	114° 04′	3401	Calgary	9 7/12	8·41	11·39	25·67	38·53	48·44	55·62	60·39	58·75	49·57	39·78	25·16	16·61	36·53
49° 45′	113° 23′	3060	Fort Macleod	3	19·40	25·70	25·10	42·50	53·20	61·10	67·10	64·30	54·60	41·00	27·20	25·90	42·26
50° 52′	113° 03′	2928	Gleichen	Part of 5	0·40	13·10	27·15	43·60	51·32	58·42	62·53	60·85	52·50	41·00	26·03	14·37	37·61
50° 02′	110° 40′	2139	Medicine Hat	11	6·29	9·72	26·35	44·05	55·12	63·15	67·83	65·78	54·45	42·64	27·70	16 39	40·00
49° 55′	109° 28′	2470	Maple Creek	5 7/12	1·68	14·30	29·60	53·68	55·32	63·33	68·38	66·21	55·81	45·60	29·73	1·65	40 44
50° 17′	107° 47′	2400	Swift Current	8 5/6	2·29	5·08	20·17	39·40	50·40	60·13	66·38	63·41	51·86	39·13	22·92	13·54	36·23
50° 29′	106° 39′	2261	Chaplin	11	−0·36	−0·10	19·05	40·53	53·51	63·77	68·96	64·20	52·15	41·42	24·26	9·63	36·40
50° 27′	104° 35′	1885	Regina	9 3/4	−6·87	−5·04	12·71	36·80	49·90	60·60	65·68	62·67	51·34	38·32	20·03	7·08	32·77

EASTERN DISTRICT.

It will be noted from the above that at Regina the temperature ranges from a mean of —6°·87 in January to a mean of 65°·68 in July, with a mean annual temperature of 32°·77.

At Chaplin, the extreme of means, is —0°·36 in January and 68°·96 in July, with a mean annual temperature of 36°·40.

This data gives a mean annual temperature for the eastern district of 34·58°.

These bare figures convey very little information regarding the mass of meteorological data that is necessary in any intelligent discussion of the climatology of a district from the standpoint of irrigation development, but will serve for purposes of comparison with temperature table given above for certain states and territories of the United States.

The climate of the eastern district resembles that of the whole arid region, in that the daily range of temperature is great, and the temperature of the day much higher than that of the night. This condition is due no doubt to the dryness of the air, which allows radiation to proceed with extreme rapidity, so that as soon as the sun sets the cooling effect of radiation is felt.

The extremes of temperature in the eastern district are very great, ranging from —40° in midwinter to 106° (in shade) in midsummer, and yet the climate is a healthy one, entirely free from malaria.

CENTRAL DISTRICT.

The mean annual temperature of the central district, from observations at Swift Current and Maple Creek, is 38°·33, or about 4° higher than the eastern district. This difference arises from higher mean winter temperature, the summer mean being about the same in both districts.

The central district is about the easterly limit of the influence of the "chinook" winds, which during the winter months blow from the west and south-west, and raise the temperature a great many degrees within a few hours. To this influence no doubt is due the higher mean annual temperature mentioned above, for the central district is at a considerably greater elevation than the eastern district, and is largely of the same open plain-like character.

It will be of interest, in view of the widely prevalent opinion that the climate of our Territories is of arctic temperature during the winter, and of the incredulity with which the statement, that many of the deciduous fruits can be successfully cultivated in portions of the arid region, is received, to note particularly the comparison between the climatology of Maple Creek, in the central district, and Denver and Grand Junction in Colorado.

TABLE of Mean Annual Precipitation and Temperature.

Place.	MEAN ANNUAL.	
	Precipitation.	Temperature.
Maple Creek, N.W.T.	11·15 inches.	40·44 degrees.
Denver, Col	14·32 do	49·50 do
Grand Junction, Col.	11·07 do	50·00 do

At Grand Junction, which is situated in the Rocky Mountains, at an elevation of some 4,500 feet, the cultivation of peaches, apricots, grapes, and all the small fruits, constitutes the main industry of the district, and a visit to the orchards, while in fruit, affords a sight that is one of the most convincing object lessons in the possibilities of horticulture by the aid of irrigation.

At Maple Creek the mean annual temperature is about 9°·5 lower than at Grand Junction, the mean annual precipitation being about the same at both places. The difference in temperature is largely due to the lower monthly mean during December and January at Maple Creek, the monthly means during the other months of the year showing very small differences.

The doubtful factor in the question of successful horticulture in the Maple Creek district is doubtless caused by the influence of the "chinook" winds, mentioned above. If these winds blow for sufficient length of time to raise the temperature so that the sap commenced to run in the shrubs or trees, and was followed by a sudden drop in temperature, the shrubs and trees would doubtless be killed, but the probability is that these winds do not last sufficiently long to warm the soil enough to cause the sap to run, and the facts disclosed by the above comparison would certainly seem to warrant the experiment of the cultivation of some of the harder fruits being attempted.

WESTERN DISTRICT.

The mean annual temperature of the western district, from the observations at Medicine Hat, Gleichen, Fort Macleod and Calgary, is 39°·10, the extremes from this mean being Fort Macleod 42°·26, and Calgary 36°·53.

While the mean annual temperature of the western district is not much higher than for the eastern, and is a few degrees lower than in the central, the monthly mean temperature during winter months does not exhibit the same extremes as are noticeable in both the latter districts.

As we go west, the elevation increases very rapidly, and the temperatures given are therefore more favourable towards the western district than are disclosed by the tables. This district is particularly susceptible to the warming influence of "chinook" winds during the winter months, and the climate, speaking generally, is very agreeable and healthy.

The comparison given above regarding the climate of Maple Creek and points in Colorado, applies with equal force to Medicine Hat and Fort Macleod; in fact, in the case of the latter point it is more favourable by two or three degrees in temperature.

METEOROLOGICAL STATIONS IN THE ARID REGION.

Reliable meteorological statistics regarding our arid region are essential in attacking the engineering problems connected with the construction of reclamation works, and it is impossible to deal intelligently with the water supply of the region until sufficient data is assembled regarding precipitation and evaporation to augment the measurement of catchment areas and run-off therefrom.

So far observations for evaporation have not been attempted, at least no results are published in meteorological tables, and it is exceedingly desirable that observations of this character should be undertaken at the principal stations, these might be augmented by observations of a like character taken in connection with irrigation surveys, and would provide at least a basis for experiment and discussion of this important factor in all schemes contemplating the storage of water.

It is also desirable that meteorological stations should be established at Wood Mountain, at Fort Macleod or Lethbridge, at Pincher Creek and at Banff; these would provide for a distribution of stations in such a manner that reliable data, applicable to the whole arid region, would be available in dealing with this important subject.

The statements compiled from the Meteorological Reports, showing monthly and annual means of temperature and precipitation for stations referred to above, are given herewith.

Department of the Interior.

CLIMATE OF WESTERN ASSINIBOIA AND SOUTHERN ALBERTA.

STATEMENT showing the precipitation in inches and hundredths at Calgary.

Latitude, 51° 02′; longitude, 114° 04′; elevation, 3401; class of station, Reporting Telegraph Station.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1885	0·65	0·96	0·84	0·49	0·41	2·15	3·70	3·06	T	T	0·30	0·35	12·91
1886	0·18	0·28	1·03	1·16	1·72	3·30	0·20	0·00	0·76	0·79	0·35	1·55	11·32
1887	0·92	0·19	0·35	0·22	0·70	2·15	3·54	2·19	1·54	0·13	0·99	0·77	13·69
1888	0·24	1·76	0·90	1·67	2·05	3·70	3·23	2·08	0·23	1·01	0·41	0·23	17 51
1889	0·92	0·75	1·50	T	2·04	0·61	2·37	T	1·39	0·52	0·12	1·37	11·59
1890	0·88	0·85	0·82	0·71	2·13	2·27	2·21	3·47	1·13	0·24	0·06	0·70	15·47
1891	0·20	0·50	T	0·07	1·38	2·20	2·81	1·58	0·97	0·27	0·20	0·46	10·64
1892	0·03	0·03	0·07	0·60	0·06	1·07	2·40	1·10	0·50	0·66	1·30	0·09	7·91
1893	0·55	0·20	0·15	0·47	2·47	1·11	1·95	0·88	0·76	0·74	1·20	0·57	11·05
1894	0·41	0·03	0·67	0·96	4·05	1·10	0·10	1·47	1·30	....	.....	.....	.....
Means	0·50	0·55	0·63	0·63	1·70	1·97	2·25	1·58	0·86	0·48	0·55	0·68	12·38

GLEICHEN.

Latitude, 50° 52′; longitude, 113° 03′; elevation, 2928; class of station, Ordinary Station, Class 2.

1885	.....	.....	0·43	1·24	0·48	1·90	3·10	1·75	0·52	0·00	0·00	1·20	.....
1886	1·04	0·06	0·70	0·60	1·52	1·49	1·27	0·00	0·15	T	.....	.....	.....
1887	.....	.....	.....	.....	0·10	.....	.....	.....	.....	.....	0.33	0.20	.....
1888	0·40	1·90	T	.....	.....	.....	.....	.....	.....	.....	.....	....	.....
1889	1·95	0·20	1·30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	1·13	0·72	0·61	0·92	0·70	1·69	2·18	0·87	0·33	0·00	0·16	0·70	10·01

MEDICINE HAT.

Latitude, 50° 02; longitude, 110° 40′; elevation, 2139; class of station, Reporting Telegraph Station.

1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·96	0·35	0·24	.....
1884	0·50	0·50	0·86	0·19	1·39	2·21	2·64	1·19	3 84	0·25	0·96	0·40	14·93
1885	0·68	0·39	0·56	0·85	0·13	3·51	1·60	1·49	0·04	0·10	0·02	0·00	9·37
1886	0·00	0·00	0 32	0·80	1·41	1·53	0·78	0·11	0·19	0·79	0·51	0·28	6·72
1887	0·30	0·00	0·00	0·63	0·12	5·75	0·29	0·98	0·41	0·46	0·25	0·70	9·89
1888	0·45	0·62	0·90	0·20	2·20	3·22	4·78	1·00	0·06	0·66	0·18	0·40	14·67
1889	0·10	0·20	0·43	1·00	2·66	0·23	1·92	0·00	0·28	0·00	0·42	0·77	8·01
1890	0·42	0·31	0·50	0·03	0 33	3·30	0·50	2·10	0·93	0·58	T	0·13	9·13
1891	0·19	1·51	1·31	0 37	1·13	4·34	1·28	1·02	1·14	0·20	0·30	0·36	13·15
1892	0·16	0·40	0·31	1·48	1·03	0·89	1·89	3·00	0·22	0·04	1·40	1·42	12·24
1893	1·58	0·70	0·23	0·77	1·09	2·25	2·53	2·17	0·34	0·41	1·23	1·16	14·46
1894	0·58	0·92	0·99	0·54	1·33	3 45	0·81	0·39	2·18	0·81	....	.....	.....
Means	0·45	0·50	0·58	0·62	1·17	2·79	1·73	1·31	0·88	0·45	0·51	0·52	11·51

MAPLE CREEK.

Latitude, 49° 55′; longitude, 109° 28′; elevation, 2470; class of station, Ordinary Station, Class 2.

1884	.....	.....	.....	.....	1·06	4·34	2·51	0·85	3·25	0·00	0·25	1·20	.....
1885	1·25	0·70	0·76	0·60	0·84	0·77	0·43	1·49	0·00	0·25	0·00	0·75	7·84
1886	0·95	0 18	0·50	0·10	0·20	5·02	0·75	0·47	0·47	0·17	0·75	1·40	10·96
1887	1·45	1·75	0·10	0·35	0·20	5·02	0·75	0·47	0·47	0·37	0·15	0·43	11·51
1888	1·05	0·18	0·50	0·15	1·20	5·05	1·28	1·64	0·63	0·48	0·10	T	12·26
1889	0·25	0·18	0·34	0·55	3·34	1·05	1·67	0 00	0·38	0·00	0·23	0·55	8·54
Means	0·98	0·60	0·44	0·35	1·14	3·54	1·23	0·82	0·87	0·21	0·25	0·72	11·15

CLIMATE OF WESTERN ASSINIBOIA AND SOUTHERN ALBERTA.

STATEMENT showing the precipitation in inches and hundredths at Swift Current.

Latitude, 50° 17′; longitude, 107° 47′; elevation, 2400; class of station, Reporting Telegraph Station.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1886	0·43	0·70	0·50	2·03	1·86	0·85	1·35	0·60	0·50	0·32	0·80	0·68	10·62
1887	0·87	1·49	0·51	1·60	1·56	3·85	3·70	1·62	1·44	0·64	0·11	0·62	18·01
1890	0·84	0·74	0·68	0·74	1·30	3·44	0·88	2·70	2·74	3·04	0·24	0·16	17·50
1891	0·36	0·44	1·44	1·52	1·16	6·80	3·36	3·20	1·64	2·07	1·32	1·24	24·55
1892	0·54	0·94	0·40	3·38	3·16	3·96	1·00	1·76	0·54	0·12	1·70	2·00	19·50
1893	1·34	1·26	0·98	0·24	0·37	1·04	3·22	2·28	0·56	1·53	0·70	1·02	14·54
1894	0·40	0·50	1·02	0·95	2·64	1·39	0·62	0·56	0·63	0·40	.....	.....	.....
Means	0·68	0·87	0·79	1·49	1·72	3·05	2·02	1·82	1·15	1·16	0·81	0·95	16·51

CHAPLIN.

Latitude, 50° 29 ; longitude, 106° 39′; elevation, 2261; class of station, Ordinary Station, Class 2.

1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	1·45	0·25	0·50	.....
1884	1·10	2·45	0·42	0·42	0·11	4·03	1·83	2·49	3·62	1·43	0·44	0·60	18·94
1885	0·90	0·56	0·03	.....	.....	.....	1·10	.....	.....	.....	0·13	0·60	. ...
1886	..	....	.....	1·20	0·95	0·76	0·75	0·95	0·22	0·04	0·44	1·12	.....
1887	0·95	0·70	0·80	0·39	0·54	1·29	0·00	0·17	0·05	0·23	0·00	0·25	5·37
1888	0·63	0·55	0·55	0·60	1·13	0·45	0·10	0·18	0·00	0·57	0·10	0·05	4·91
1889	0·20	0·25	0·40	0·35	1·58	0·09	0·15	0·00	0·06	0·00	0·08	0·62	3·78
1890	0·20	1·10	0·30	0·10	0·15	1·36	0·09	0·21	1·07	0·68	0·00	0·00	5·26
1891	0·35	0·70	T	1·40	0·07	0·00	1·90	0·00	0·08	0·99	0·30	0·30	6·09
1892	0·10	0·20	0·20	0·80	0·04	0·51	0·00	.....	.....	0·00	0·77	0·20	.
1893	0·49	0·60	0·10	0·08	0·04	0·17	0·22	0·26	0·03	0·25	0·50	0·25	2·99
1894	0.25	0·20	0·60	0·86	0·24	0·19	0·00	0·08	0·21	.....	.....	.....	.....
Means	0·52	0·73	0·34	0·62	0·48	0·88	0·56	0·48	0·59	0·56	0·27	0·41	6·44

REGINA.

Latitude, 50° 27′; longitude, 104° 35′; elevation, 1885 ; class of station, Chief Station.

1883	.....	.....	.....	.....	2·25	0·93	1·11	.	.....	.....	.....	.....	.....
1884	0·33	0·18	0·30	0·38	0·13	3·55	1·80	0·91	1·52	0 68	0·53	1·15	11·46
1885	0·15	0·15	0·78	1·45	0·04	0·51	0·32	T	0·14	0·48	0·87	R	4·89
1886	0·00	0·56	0·60	T	0·14	0·01	0·06	0·05	0·03	T	0·30	0·15	1·90
1887	0·15	0·00	0·45	0·01	0·14	0·70	0·01	0·24	0·34	0·03	0·05	0·30	2·42
1888	0·85	0·50	1·25	0·83	0·12	3·68	1·29	1·35	0·00	0·53	0·25	0·10	10·75
1889	0·36	0·48	0·48	0·47	0·81	0·13	0·19	T	0·48	0·29	0·20	0·50	4·39
1890	0·35	0·48	0·45	0·12	0·67	4·96	2·04	0·92	0·96	1·98	0·20	0·50	13·63
1891	0·35	0·53	0·38	0·85	1·96	5·73	1·20	1·25	1·00	0·68	0·36	0·53	14·82
1892	0·10	0·25	0·73	2·28	1·26	1·10	1·22	2·07	1·70	1·21	0·32	0·28	12·52
1893	0·87	0·85	0·06	1·15	0·82	1·30	0·81	0·50	0·11	0·84	0·46	0·28	8·05
1894	0·45	0·33	0·35	0·78	0·80	1·08	0·14	....	....	....	....	.....	.....
Means	0·36	0·39	0·53	0·76	0·76	1·97	0·85	0·73	0·63	0·67	0·35	0·38	8·38

CLIMATE OF WESTERN ASSINIBOIA AND SOUTHERN ALBERTA.

STATEMENT showing mean temperatures at Calgary.

Latitude, 51° 02′; longitude, 114° 04; elevation, 3401; class of station, Reporting Telegraph Station.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
	°	°	°	°	°	°	°	°	°	°	°	°	°
1885.....	7·8	16·0	36·7	39·5	49·1	56·6	56·6	56·9	48·9	40·3	.....	.....	.....
1886.....	—2·1	26·4	27·0	41·7	49·2	58·3	64·9	59·4	49·4	40·8	27·1	14·4	38·04
1887.....	4·0	—4·1	24·8	38·6	49·6	53·5	60·3	56·8	50·3	39·9	25·6	9·0	34·02
1888.....	—1·8	20·8	15·0	35·1	47 5	54·0	59·2	58·8	53·8	37 2	20·9	21·3	35·15
1889.....	16·7	18·6	35·0	44·6	49·3	57·6	59·3	58·8	48·7	44·3	27·7	13·9	39·54
1890.....	—4·8	1·1	21·9	35·6	47·9	57·3	60·3	58·0	49·0	38·0	39·9	25·8	35·83
1891.....	26·5	0·2	23·5	43·3	49·3	54·9	61·5	58·2	50·7	42·1	23·2	18·8	37·68
1892.....	14·5	16·3	29·7	34·1	43·9	55·8	59·9	57·8	50·4	40·6	19·0	12·0	36·17
1893.....	14·7	4·0	19·1	32·7	49·4	52·2	59·2	60·5	48·3	34·8	17·9	17·7	34·21
1894.....	8·6	14·6	24·0	40·1	49·2	56·0	62·7	62·3	46·2	.....	.....	.....	.....
Means	8·41	11·39	25·67	38·53	48·44	55·62	60·39	58·75	49·57	39·78	25·16	16·61	36·53

STATEMENT showing the mean monthly and mean annual temperature for a period of three years at Fort Macleod.

Latitude, 49° 45′; longitude, 113° 23′; elevation, 3060; class of station.

Date not speci'd	19·4	25·7	25·1	42·5	53·2	61·1	67·1	64·3	54·6	41·0	27·2	25·9	42·26

STATEMENT showing mean temperatures at Gleichen.

Latitude, 50° 52′; longitude, 113° 03′; elevation, 2928; class, of station, Ordinary Station, Class 2.

1885.....	.....	.....	34·8	40·2	51·6	61·2	59·6	59·0	50·7	40·2	32·7	23·2	.....
1886.....	—4·2	25·9	27·2	41·6	52·2	59·6	69·1	61·2	50·1	38·2	.....	.....	.....
1887.....	—0·4	—6·8	26·2	.....	55·4	.....	.....	.....	.....	.....	26·4	10·1	.....
1888.....	—2·6	17·9	14·9	.....	.....	.....	.....	64·1	56·7	39·9	19·0	15·2	.....
1889.....	8·8	15 4	32·6	49·0	46·1	54·5	58·9	59·1	.....	45·7	.....	9·0	.....
Means	0·40	13·10	27·15	43 60	51·32	58·42	62·53	60·85	52·50	41·00	26·03	14·37	37·61

MEDICINE HAT.

Latitude, 50° 02′; longitude, 110° 40′; elevation, 2139; class of station, Reporting Telegraph Station.

1883.....	.....	.....	.....	.....	.....	.....	.....	.....	55·4	37·0	20·6	18·5	.....
1884.....	11·1	9·4	18·5	39·9	57·4	65·2	63·6	64·8	48·4	43·2	32·4	—0·6	37·77
1885.....	3·4	10·3	34·7	44·2	55·7	63·6	65·9	65·3	57·2	45·2	38·1	28·4	42·67
1886.....	—4·7	27.5	29·1	48·1	58·0	68·6	68·3	70·2	54·8	45·7	27·5	14·2	42·27
1887.....	—0·1	—7·9	30·4	44·4	56·7	60·2	66·6	62·8	57·5	42·0	28·3	12·4	37·78
1888.....	—2·1	20·3	17·8	42·3	52·8	60·7	66·9	64·0	58·2	41·7	23·5	19·6	38·81
1889.....	10·5	16·2	36·2	50·9	55·0	65·9	66·1	65·8	53·4	46·0	29·4	13·6	42·42
1890.....	—7·8	0·3	25·3	42·6	55·0	64·3	71·0	65·0	52·6	42·5	36·5	28·6	39·66
1891.....	24·6	0·0	22·9	50·4	54·9	61·1	68·5	66·1	56·3	43·7	25·1	22·5	41·34
1892.....	14·0	15·0	31·8	39·1	48·4	62·2	67·8	64·3	55·4	43·7	23·7	10·8	39·78
1893.....	12·5	1·6	17·1	36·5	55·7	59·8	68·4	66·6	51·4	38·4	19·6	18·2	37·15
1894.....	7·8	14·2	26·1	46·2	56·7	63·1	73·0	68·7	52·8	.....	.....	.....	.....
Means	6·29	9·72	26·35	44 05	55·12	63·15	67·83	65·78	54·45	42·64	27·70	16·93	40·00

CLIMATE OF WESTERN ASSINIBOIA AND SOUTHERN ALBERTA.

STATEMENT showing mean temperatures at Maple Creek.

Latitude, 49° 55′; longitude, 109° 28′; elevation, 2470; class of station, Ordinary Station, Class 2.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
	°	°	°	°	°	°	°	°	°	°	°	°	
1884	.....	.....	.....	.....	.....	63·1	63·4	65·5	47 8	46·6	27·7	−0·8	.....
1885	−9·8	10·7	33·5	42·6	53·2	62·7	65·3	63·8	56·8	43·0	33·3	28·9	40·33
1886	−2·5	27·0	27·8	46·1	56·7	68·7	74·7	67·4	52·9	44·4	25·8	13·4	41·87
1887	2·0	−5·4	30·6	44·5	58·6	60·9	69·7	64·5	59·0	42·2	29·7	13·0	39·11
1888	−0·3	19·8	18·7	43·7	54·0	61·1	70·6	66·8	62·9	45·6	27·7	24·6	41·27
1889	19·0	19·4	37·4	51·5	54·1	63·5	66·6	69·3	55·5	51·8	34·2	19.9	45·18
Means	1·68	14·30	29·60	53·68	55·32	63·33	68·38	66·21	55·81	45·60	29·73	1·65	40·44

SWIFT CURRENT.

Latitude, 50° 17′; longitude, 107° 47′; elevation, 2400; class of station, Reporting Telegraph Station.

1886	−7·4	18·9	21·8	42·7	53·1	63·8	72·7	64·7	49·3	41·6	22·7	7·6	37·62
1887	−3·8	−7·7	23·8	39·1	51·8	58·5	64·3	59·3	53·1	36·0	23·4	7·0	33·73
1888	−6·1	13·0	11·8	35·7	48·0	57·9	64·6	61·6	55·5	39·7	23·0	19·7	35·37
1889	9·0	13·2	32·0	45·6	49·6	60·7	62·5	65·7	50·9	42·7	25·3	11·0	39·02
1890	−6·9	−4·1	19·0	38·3	49·1	62·5	68·1	61·0	49·3	39·1	32·5	24·2	36·01
1891	19·2	−3·1	17·1	45·2	50·6	56·4	62·5	62·2	54·1	38·8	20·3	17·6	36·74
1892	6·5	8·7	23·5	35·0	45·1	58·3	66·5	63·3	54·0	42·4	19·6	7·7	35·88
1893	7·3	−1·6	12·5	30·8	52·7	59·3	65·9	64·6	49·9	33·9	16·6	13·5	33·78
1894	2·8	8·4	20·0	42·2	53·6	63·8	70·3	68·3	50·6	38·0	.....	.....	.....
Means	2·29	5·08	20·17	39·40	50·40	60·13	66·38	63·41	51·86	39·13	22·92	12·54	36·23

CHAPLIN.

Latitude, 50° 29′; longitude, 106° 39′; elevation, 2261; class of station, Ordinary Station, Class 2.

1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	37·6	15·1	7·4	.....
1884	2·3	−6·2	14·3	37·6	56·0	66·7	65·5	65·7	48·0	39·4	26·2	−4·6	34·24
1885	−5·5	2·7	27·5	.....	.....	.....	71·2	.....	.....	.....	36·6	20·2	.....
1886	.....	.....	29·6	42·6	54·3	62·3	63·0	55·4	45·7	42·4	18·3	−0·5	.....
1887	−15·2	−12·9	19·4	41·6	58·0	63·6	70·0	61·8	51·9	38·2	23·9	7·4	34·97
1888	−10·0	7·2	8·7	33·4	51·1	60·2	68·0	65·1	58·9	42·3	24·1	20·7	35·81
1889	7·2	11·4	28·9	43·4	54·7	66·6	66·0	69·2	53·2	45·4	25·3	7·6	39·91
1890	−5·4	9·8	17·5	41·4	51·1	66·4	70·4	62·6	49·3	42 3	39·7	28·8	39·49
1891	22·7	−11·1	10·8	49·5	57·7	59·2	66·3	65·0	55·8	38·7	20·2	17·8	37·72
1892	0·7	6·8	20·7	38·7	42·2	63·8	75·2	.....	.....	48·9	21·0	0·0	.....
1893	3·6	−5·3	10·3	35·3	55·3	65·3	70·2	64·8	54·4	39·0	16·5	1·1	34·21
1894	−4·0	−3·4	21·9	41·8	54·7	63·6	72·8	68·2	52·2	.....	.....	.....	.....
Means	−0·36	−0·10	19·05	40·53	53·51	63·77	68·96	64·20	52·15	41·42	24·26	9·63	36·40

REGINA.

Latitude, 50° 27′; longitude, 104° 35′; elevation, 1885: class of station, Chief Station.

1885	−13·6	−6·0	17·6	37·3	50·5	57·5	62·3	58·2	51·0	36·7	27·9	14·3	32·81
1886	−15·3	−1·4	15·1	40·0	52·5	65·2	73·0	64·4	47·6	40·8	16·6	−3·5	32·92
1887	−16·3	−15·1	13·7	36·8	53·0	59·9	62·8	60·3	53·0	32·7	23·2	2·5	30·54
1888	−13·9	0·0	1·7	29·4	48·1	60·3	64·8	60·5	54·8	37·8	15·8	20·3	31·63
1889	4·8	1·9	30·0	43·3	50·8	60·3	63·2	66·6	49·3	41·5	19·5	6·7	36·49
1890	−8·2	−11·1	9·2	36·8	46·3	64·0	66·5	60·5	49·3	40·4	29·6	17·8	34·17
1891	11·1	−9·8	7·9	43·5	49·5	56·8	62·7	60·7	53·1	37·9	16·3	8·8	33·21
1892	−8·4	−1·8	13 6	31·5	44·3	57·1	65·9	63·2	54·4	43·0	16·9	−1·5	31·52
1893	−2·0	−7·5	5·4	28·9	51·2	60·2	64·4	64·0	50·5	34·1	14·5	−1·7	30·17
1894	−6·9	0·4	12·9	40·5	52·8	64·7	71·2	68·3	50·4	.....	.....	.....	.....
Means	−6·87	−5·04	12·71	36·80	49·90	60·60	65·68	62·67	51·34	38·32	20·03	7·08	32·77

IRRIGATION SYSTEMS.

The first attempt at irrigation, within our arid region, was made on Fish Creek in Southern Alberta, about eight miles south of the present city of Calgary. Here Mr. John Glen, who had settled in the district in 1875, constructed a small ditch in 1879, and utilized it to irrigate some 15 acres with satisfactory results.

About the time of the construction of Mr. Glen's ditch several others seem to have been started. One on what is now the Peigan Indian Reserve, taking water from the Old Man River about a mile above the present site of the agency. Another taking water from Belly River, on what is now the Cochrane Ranch Company's Home Ranch, and a third near the Cypress Hills. None of these systems, however, seem to have been completed or utilized in carrying water for growing crops.

In 1883 Messrs. Smith and French constructed a ditch at High River, taking water from that stream, but the system, owing to faulty engineering, did not prove a success, and probably the plentiful rainfall in 1884 caused doubt in the minds of the owners as to the necessity for irrigation.

In 1889 a small ditch was constructed to take water out of Bear Creek, which heads in the Cypress Hills; the water was utilized in growing hay, and the experiment seems to have been entirely satisfactory.

These structures were all of a very small and experimental character, and the necessity for irrigation of large areas forced itself very slowly into people's minds, what had been done being looked upon as a mere experiment.

The existing climatic conditions, and the necessity for irrigation, had been frequently referred to in the reports of Dominion land surveyors employed in surveying this arid region into townships and sections, but it is probably due to the lengthy reports upon this subject, and to the persistent advocacy of the principle by Mr. Wm. Pearce, Superintendent of Mines, more than to any other cause, that the public have at last recognized the necessity for irrigation and the benefits to be secured therefrom.

In 1891 a ditch to irrigate about 160 acres was constructed by Mr. John Quirk. The water is taken out of the North Fork of Sheep Creek in Township 20, Range 4, west of the 5th Meridian. The results which followed the application of water, through this system, were so satisfactory that Mr. Quirk's neighbours immediately set about constructing ditches and there are now nine irrigation systems heading in that stream, and considerable tracts of land have been reclaimed thereby.

From 1891 interest in the question has been steadily growing, and during the past two years very considerable progress has been made in ditch construction and the reclamation thereby of otherwise arid and unproductive areas.

In 1891 the Macleod Irrigation Company was granted a charter by Act of the Parliament of Canada. In 1892 the High River and Sheep Creek Irrigation and Water Power Company were granted a charter, and the Alberta Railway and Coal Company were granted the right to construct irrigation works. In 1893 charters were granted to the Alberta Irrigation Company, the Calgary Hydraulic Company and the Calgary Irrigation Company.

The two last mentioned companies are the only ones which have exercised the powers granted them, and as both these schemes are deserving of some special mention the systems constructed by them are referred to at some length further on.

The following schedule will illustrate the extent to which irrigation has already been undertaken in the arid region.

SCHEDULE of Irrigation Canals and Ditches in operation, under construction, or projected, in Southern Alberta and Western Assiniboia.

Name.	Address.	Source of Water Supply.	Location of Head-works.					Length of Ditch.	Estimated		Remarks.
			Pt. of Sec.	Section.	Township.	Range.	West of.		Capacity in Second.	Area to be Irrigated.	
								Miles.	Feet.	Acres.	
Alberta Irrigation Co	Lethbridge, Alta	St. Mary River									No construction undertaken.
Adams & Co.	Millarville, Alta	N. Fork of Sheep Creek	N. W.	2	21	3	5	0·38	1·00	100	Partly constructed.
Austin & Matheson	Dewdney, Alta.	Sheep Creek	N. E.	35	20	2	5	1·00	2·00	120	Constructed and in operation.
Anderson, G., jun	Millarville, Alta.	N. Fork of Sheep Creek		8	21	3	5	0·75	1·00	70	do do
Anderson, G., jun	do	do		4	21	3	5	0 30	1·00	25	do do
Aird, James	do	do	N. E.	4	21	3	5	1·00	4·00	300	do do
Broderick, R. N	High River, Alta.	Little Bow River	N. W.	20	18	28	4	0·50	1·20	120	do do
Bannerman, J	Calgary, Alta.	Nose Creek	S W.	12	26	2	5	1·00	10·00	300	Projected.
Bell, George	Millarville, Alta.	N. Fork of Sheep Creek		6	21	3	5	1·00	4·00	120	Constructed and in operation.
Bannister, A. E	Davisburg, Alta	Bow River	N. E.	7	22	28	4	1·67	1·50	150	do do
Botterell, A. E	Cochrane, Alta.	Dog Pound Creek	S. E.	21	28	4	5	1·36	2·00	80	do do
Bebo, Nelson	Calgary, Alta.	Spring adjoining Fish Creek	N. ½	5	23	1	5	0·47	1·00	100	do do
Bean, Thomas	do	Elbow River	N. E.	5	24	2	5	0·50	1·00	100	do do
Bow River Horse Ranch Co.	Mitford, Alta.	Jumping Pound Creek	N. E.	33	25	4	5	0·53	2·50	250	Surveyed and projected.
Bourassa, E	Battleford, Sask.	A creek in this township	S. ½	32	46	16	3			160	
British American Ranch Co.	Calgary, Alta.	Big Hill Creek		10	26	4	5	0·70	1·00	90	Partly constructed.
Calgary Irrigation Co	do	Elbow River	S. E.	4	24	4	5	50·00	450·00	45,600	Partly constructed and in operation; remainder surveyed and located.
Calgary Hydraulic Co.	do	Bow River	S. W.	4	25	2	5	5 00	25·00	2,500	Constructed and in operation.
Claustre, Jean	Maple Creek, Assa.	Pie-a pot Creek	S. W.	19	10	24	3	1·00	3·00	300	do do
Cochrane, W. F	Macleod, Alta.	Belly River		6	5	26	4	4·00	2·00	200	do do
Card, C. O.	Cardston, Alta.	Lees Creek		9	3	25	4	0·50		50	do do water used for irrigating and power purposes.
do	do	St. Mary River								40,000	Surveyed and projected.
do	do	Lees Creek		5	3	25	4	4 00	8·00	800	Constructed and in operation; to be enlarged.
do	do	do	S. W.	26	2	26	4	4·00	35·00	3,500	Surveyed and projected.
Cochrane, T. B. H	Mitford, Alta	Big Hill Creek	S. W.	10	26	4	5	1·00	5·00	400	Projected.
Canadian Co-operative Colonization Co.	Indian Head, Assa.	Springs on Secs. 19 and 20				17	13	2	9·00		Partly constructed.
Davis, J. R.	Lethbridge, Alta.	Etzi-kom Coulée			31	6	19	4		1·00	100	Constructed and in operation.
Dowling, Annie	Priddis, Alta.	South Fork of Fish Creek	N. E.	4	22	3	5	0·50	5·00	110	Surveyed and projected.

Elton, E. A	Pincher Creek, Alta	A creek in this township	S. W.	31	8	1	5	1·00	10·00	160	Constructed and in operation.
Edgar, William	Forks Fish Creek, Alta	Fish Creek	N. E.	26	22	3	5	0·75	3·00	90	do do
Ellis, J	Spring Bank, Alta	Elbow River	S. E.	14	24	4	5	1·08	1·00	100	do do
Elliott, W. B	Cochrane, Alta	Big Hill Creek		10	26	4	5			7	do do
Fauquier, H. H	Maple Creek, Assa	Hay Creek	S. W.	29	10	25	3	0·50	2·00	160	do do
Fisher, Jos	Millarville, Alta	North Fork of Sheep Creek	N. E.	2	21	3	5	1·25	5·00	200	do do
Fraser & McKinnon	do	do	N. W.	7	21	2	5	1·50	5·00	300	do do
Flint, Chas	Priddis, Alta	North Fork of Fish Creek	N. E.	21	22	3	5	1·00	5·00	120	do do
Glennie, W. G	Maple Creek, Assa	Pie-a-pot Creek	N. E.	7	10	24	3	0·50	1·00	100	do do
Garrow, Fred	Macleod, Alta	Willow Creek									Projected.
Gardner, Capt. M	Spring Bank, Alta	Small creek, tributary of Elbow River.	N. W.	12	24	4	5	0·57	1·00	100	Constructed and in operation.
do	do	do	S. W.	18	24	3	5	0·61	1·00	100	do do
Glen Estate	Midnapore, Alta	Fish Creek	S. E.	4	23	1	5	1·00	1·00	70	do do
Hassan, Eugene	St. Mary River	Pot Hole Creek		17	7	21	4	1·50	3·00	300	Under construction.
High River and Sheep Creek Irrigation and Water Power Co.	Calgary, Alta	High River and Sheep Creek									No construction undertaken.
Hull Bros	do	Fish Creek	N. ½	35	22	1	5	2·00	10·00	1,000	Constructed and in operation.
Hull, W. R	do	Spring creek in this township.	S. ½	25	15	29	4	1·00	5·00	320	Projected.
Hooper, R. C	Spring Bank, Alta	Elbow River	N. E.	9	24	3	5	1·02	2·00	200	Constructed and in operation.
Howe, Samuel	Dewdney, Alta	Branch of South Fork of Sheep Creek.						1·50	1·50	150	Township not surveyed; constructed and in operation.
Hamilton, Robert	do	Sheep Creek	W. ½	24	20	29	4	1·00	1·00	100	Surveyed and projected.
High River Horse Ranch Co	High River, Alta	High River	N. W.	30	18	29	4	6·50	20·00	2,000	Constructed.
Indian Department	Blackfoot, I.R	Bow River						4·00	15·00	1,200	Constructed and in operation.
Johnstone, G. Hope	Calgary, Alta	Rosebud River	S. W.	14	27	24	4	0·50	4·00	200	Reservoir created by construction of dam 1,100 feet long; ditch in operation.
Kerfoot, W. D	Mitford, Alta	Coal Creek	S. E.	22	27	5	5	2·20	5·00	500	Surveyed and projected.
Lott, H	Calgary, Alta	Elbow River	S. W.	7	24	2	5	0·85	2·00	200	Constructed and in operation.
Lucas, A	do	do	N. E.	5	24	2	5	1·74	1·00	100	Partly constructed.
Lane, Geo	High River, Alta	Coons Creek, a tributary of Willow Creek.		11	14	30	4	3·00	3·00	300	Constructed and in operation.
Lineham, John	Dewdney, Alta	Branch of South Fork of Sheep Creek.						0·30	1·00	100	Township not surveyed; constructed and in operation.
Lougheed, W. A	Calgary, Alta	West Fork of Nose Creek		10	26	2	5	1·00			Projected.
Leeds, Elliott & Co	New Oxley, Alta	Willow Creek		1	13	28	4	2·00	5·00	500	Partly constructed.
Levasseur, F	Pincher Creek, Alta	Pincher Creek		6	30	4					Projected.
Lloyd, Alfred	Maple Creek, Assa	Pie-a-pot Creek	S. W.	20	10	23	3	1·00	1·00	30	do
McLaughlin, John	High River, Alta	High River	S. E.	5	19	29	4	0·75	3·00	200	Constructed and in operation.
May, E. G	Calgary, Alta	Spring in this township		7	24	2	5		1·00	100	Two small ditches in operation.
Millar, Malcolm S	Millarville, Alta	North Fork of Sheep Creek		3	21	3	5		5·00		Projected.
McDonough, Jas	High River, Alta	High River	S. W.	25	18	1	5	1·25	5·00	350	Partly constructed.
Maloney, Wm	Calgary, Alta	Bow River	E. ½	26	23	1	5	2·00	3·00	300	Constructed and in operation.
McDonald, A	New Oxley, Alta	N. Fork of Trout Creek	N. W.	26	12	29	4	1·50	2·00	100	do do
Maunsell Bros	Macleod, Alta	Old Man River	N. E.	35	8	27	4	2·00	5·00	500	do do
McIntosh, C. W	High River, Alta	Spring on this section		33	18	29	4	2·00	1·00	100	Projected.

SCHEDULE of Irrigation Canals and Ditches in operation, under construction, or projected, &c.—*Continued.*

Name.	Address.	Source of Water Supply.	Location of Head-works.					Length of Ditch.	Estimated		Remarks.
			Pt. of Sec.	Section.	Township.	Range.	West of		Capacity in Second.	Area to be Irrigated.	
								Miles.	Feet.	Acres.	
Moseley Bros	Priddis, Alta.	Fish Creek	N. ½	21	22	3	5	0·28	1·00	100	Constructed and in operation.
Macleod Irrigation Co	Macleod, Alta	Old Man River									No construction undertaken.
McDonald & Rodgers	Dewdney, Alta	Sheep Creek	E. ½	25	20	2	5	5·00	10·00	1,000	Constructed and in operation.
Mounted Police	Macleod, Alta	Waterton River	N. W.	28	6	25	4	1·82	2·00	160	Constructed.
Mounted Police	do	Spring in this township	S. W.	20	2	24	4	1·00	1·00		do
Newbolt, R. N	Calgary, Alta	Bow River	N. W.	34	21	28	4	1·28	1·50	150	Constructed and in operation.
Newson, A. C	do	Creek in this township	S. W.	35	21	3	5	0·50	1·00	100	do do
Nelson, John A	Cardston, Alta	Lees Creek	N. E.	36	2	26	4		1·00	40	do do
Ockley, James W	Priddis, Alta.	Fish Creek	N. ½	10	22	3	5	1·23	1·00	80	do do
Owens, John	Pine Creek, Alta	Pine Creek	E. ½	11	22	1	5	0·47	1·00	100	Under construction.
Payne, Wm	Mountain View, Alta	A spring creek	N. W.	12	2	28	4	180 ft.		25	Constructed and in operation.
Philbrick, E. F	Calgary, Alta	Bow River	S. W.	10	21	19	4	0·80	4·00	400	Surveyed and projected.
Patterson, George	do	A small creek in this Tp.	S. W.	32	21	3	5	0·68	1·75	175	do do
Potter & Wallace	High River, Alta	High River	W. ½	1	19	29	4	4·00	10·00	1,000	Constructed and in operation.
Priddis, Charles	Priddis, Alta.	N. Fork of Fish Creek	N. E.	21	22	3	5	1·00	6·00	130	do do
Quirk, John	Millarville, Alta.	N. Fork of Sheep Creek	S. E.	33	20	4	5	1·50	2·00	80	do do
Quirk, John	do	do do	S. W.	5	21	4	5	3·00	3·00	200	do do
Quorn Ranche Co	Dewdney, Alta	Springs and S. Fork of Sheep Creek.									Projected.
Russell, George F	Lethbridge, Alta	Pot Hole Creek		17	7	21	4	1·25	1·00	100	Under construction.
Ricardo & Bevan	Calgary, Alta.	Bow River	S. W.	20	22	29	4	3·00	5·00	300	Constructed and in operation.
Scott, R. J	Innisfail, Alta	Spring near Innisfail									Projected.
Stewart, W. W	Jumping Pound, Alta	Jumping Pound Creek	N. ½	19	24	3	5	0·19	1·00	100	Constructed and in operation.
Smith, Patterson, Broward & Co	Macleod, Alta	Belly River	N. E.	14	8	25	4	3·36	20·00	1,600	do do
Skrine, Walter	High River, Alta.	Mosquito Creek	S. W.	8	16	1	5	0·66	1·50	150	do do
Short & McLaughlin	do	Old channel, a tributary of High River.	S. E.	33	18	29	4	2·25	8·00	600	do do
Short, C. C.	do	High River	S. W.	34	18	29	4	1·00	2·00	120	Partly constructed.
Spalding & Blunt	do	High River	N. W.	29	18	29	4	1·00	1·00	50	Under construction.
Springbank Irrigaton Co	Calgary, Alta	Elbow River	S. E.	4	24	4	5	36·00	212·00	21,200	Surveyed and projected.
Sidebottom, R. B.	Boissevain, Man	Lakes and streams in Tp. 1, Rges. 18 to 22 W. of P.M.									Projected.
Towers, Frank	Mitford, Alta	Jumping Pound Creek									

Turner, Robert	Millarville, Alta	N. Fork of Sheep Creek	.....	3	21	3	5	0·75	3·00	150	Constructed and in operation.
Turner, John A	do	do do	.....	8	21	3	5	..	3·00	.....	do do
Turner, John A	do	Small creek in this Tp.	.....	9	21	3	5	0·25	1·00	50	do do
Vaudin, E. H. O	Calgary, Alta	Elbow River	S. W.	3	24	4	5	1·00	2·00	100	do do
Wilder, Bret	High River, Alta	High River	W. ½	6	19	28	4	4·00	5·00	500	Surveyed and projected.
Wait & Aird	Millarville, Alta	N. Fork of Sheep Creek	.....	23	20	4	5	2·00	6·00	300	Constructed and in operation.
Ware, John	do	do do	S. E.	27	20	4	5	1·25	1·00	100	do do
Young, George T	do	S. Fork of Fish Creek	N. W.	3	22	3	5	1·20	1·20	120	do do

NOTE.—In the case of m the smaller ditches, the length, capacity and area to be irrigated are approximations based on information received.

The 76 ditches constructed, as shown by the foregoing schedule, with the exception of those of the Calgary Hydraulic Company, and the Calgary Irrigation Company, are mostly small systems designed to supply private needs, but many of them are capable of enlargement so as to carry a very considerable quantity of water, and serve large areas of irrigable land. The total area under constructed ditch is probably in excess of that shown, and with the completion of the works under construction, a very considerable acreage of land will be farmed through this agency.

During the past year the Canadian Pacific Railway Company made some preliminary surveys to determine the feasibility of diverting water from the Bow River, near Calgary, to serve the country adjacent to the railway line east of that point. The result of these investigations would seem to prove that water can be easily and cheaply diverted at the point mentioned, and it is realized by all that the construction of an extensive system of this kind, and the reclamation thereby of the extensive areas of good land in the district lying between the Red Deer, Bow and South Saskatchewan rivers, will prove of vast benefit to the company and the country at large.

THE CALGARY HYDRAULIC COMPANY.

This company was incorporated, as has been stated, by Act of Parliament in 1893; they at once proceeded with the surveys to enable them to project their scheme, and by August of that year they had commenced construction.

The main ditch is about 4½ miles in length, and heads in the Bow River on the south side of the stream, in Section 5, Township 25, Range 2, west of the 5th Meridian, it then follows closely along the bank of the stream, which it crosses by means of a truss bridge of two spans, and about 1,500 feet of 30 inch barrel flume, in the N. E. ¼ of Section 26, in Township 24, Range 2, west of 5th Meridian. From that point the ditch follows the northerly slope of the Bow River valley to the outline between Ranges 1 and 2, west of 5th Meridian, Township 24, where the main ditch at present ends.

The works of this company were completed in September of this year, and water has been supplied to a number of settlers for fall irrigation. The system has been well built, and the bridge and flume carrying water across the Bow River are particularly well designed and completed structures (*see* Plate I.). The barrel flume erected is the first of its kind in our Territories, and the success attending its use, and the manner in which it stands our climate, will be watched by those engaged in irrigation with a great deal of interest.

The company expect to have a very considerable acreage under irrigation next season, the larger part of which is good soil, and, as it is in the immediate vicinity of Calgary, it will doubtless prove a valuable object lesson to many who are unacquainted with irrigation.

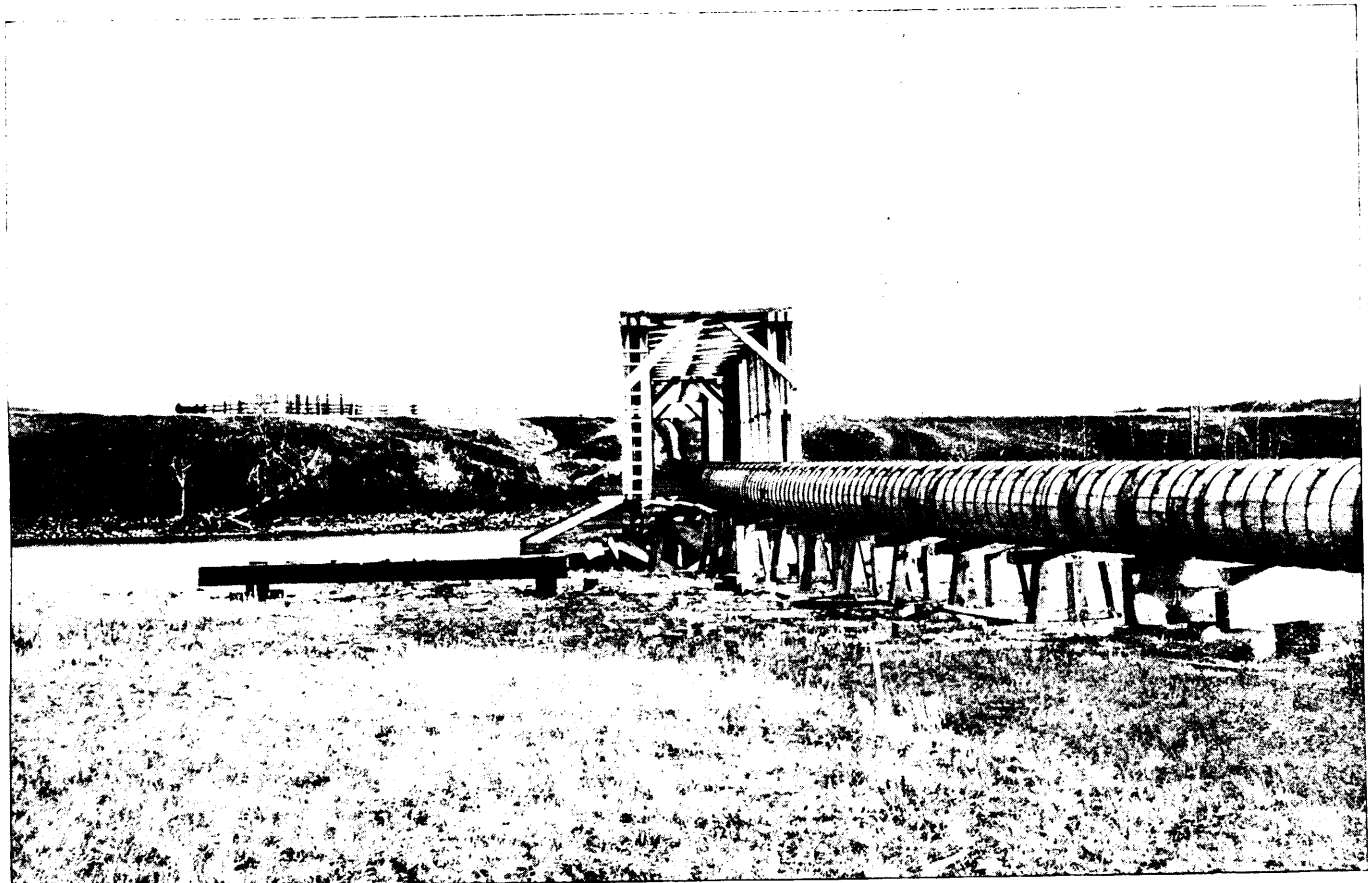
THE CALGARY IRRIGATION COMPANY.

The Calgary Irrigation Company immediately after their incorporation, as mentioned above, proceeded with the necessary surveys to enable their system to be projected.

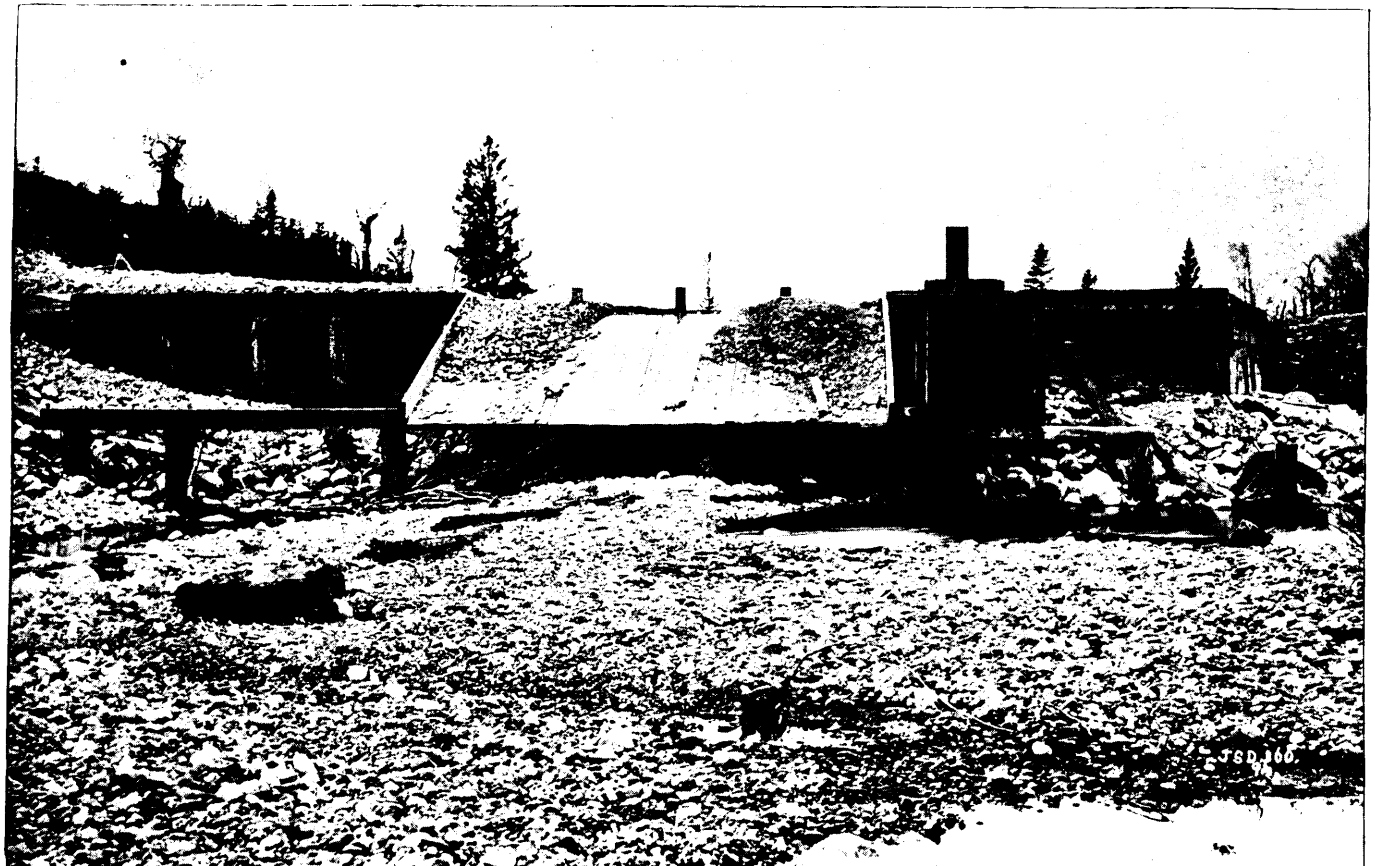
They first located their headworks on Section 11, Township 24, Range 4, west of 5th Meridian, taking water from the Elbow River, on the south side of the stream; their subsequent survey, however, demonstrated that by moving up the river to Section 4, in the same township, a much more extensive and complete system could be projected. They therefore located their headworks at this point and began construction, and by the close of the season of 1893, had the headworks and some six miles of main ditch completed.

During the past summer the completed portion of the system was used in irrigating a considerable area of land for the growth of hay, with fairly good results.

The necessary surveys were continued this summer, and by September the company were able to deposit their plans and application for a completed system which contemplates the diversion of sufficient water to irrigate some 45,000 acres, the main ditch extending south and east from the Elbow River to near the mouth of High River, a distance, including main distributaries, of about fifty miles.

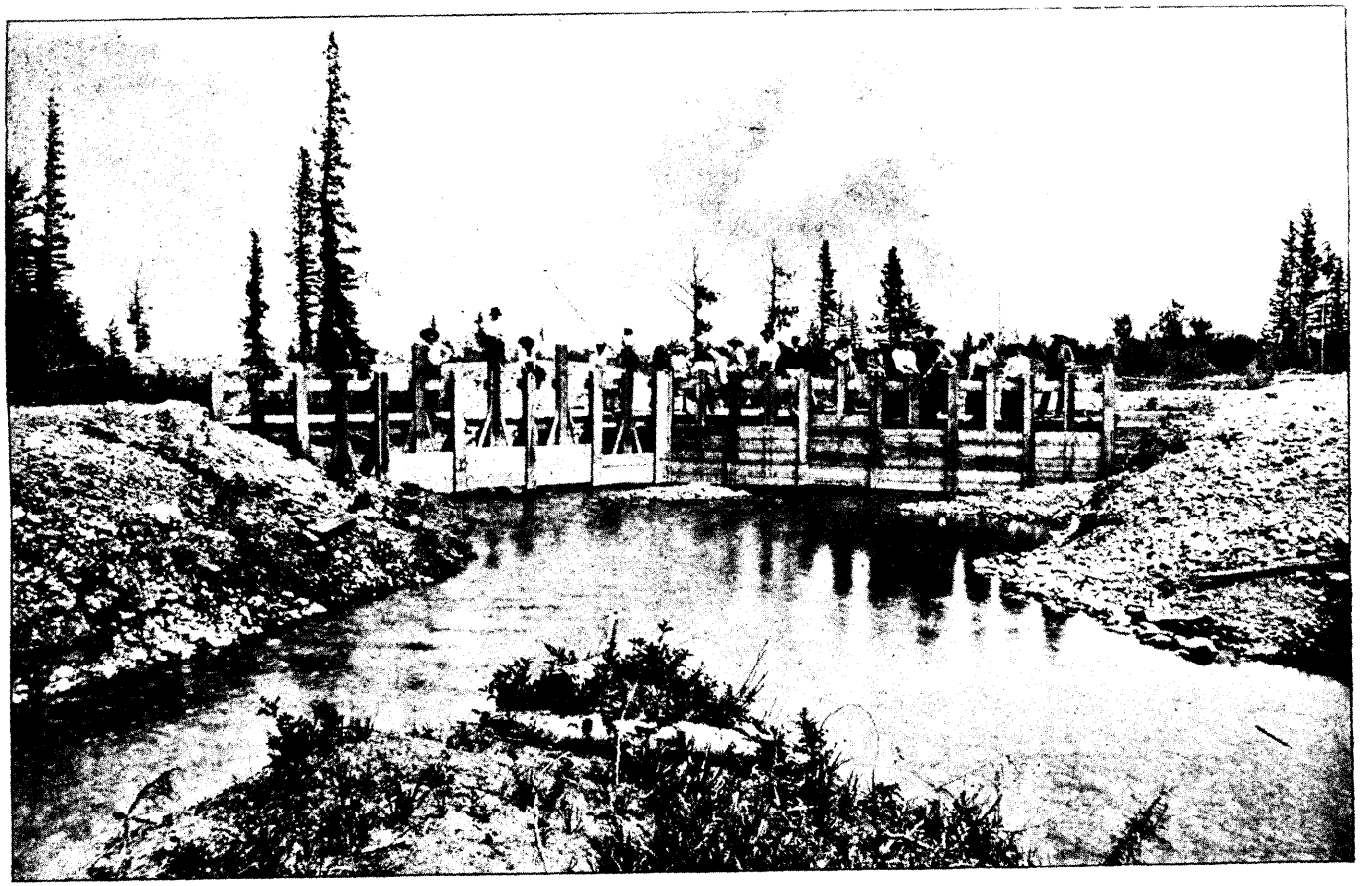


Bridge and barrel flume across Bow River.—Calgary Hydraulic Company's Canal.



Dam at east end of reservoir.—Calgary Hydraulic Company's Canal.

Headgate of Calgary Hydraulic Company's Canal.



Inner headgate.--Calgary Irrigation Company's Canal.

Calgary Irrigation Company's Canal, near headgate.

This scheme, which is the largest and most complete system so far projected, is a particularly practical one, and is destined to have a very important bearing upon the future prosperity of the district which it is intended to serve.

The promoters have followed a very wise course in making complete and exhaustive surveys, and examination of the country traversed by the main ditch, before projecting a location therefor, and although these surveys cost a considerable sum, the money is well invested in procuring such a good location for their main canal, and one so free from flumes or other structures, which add both to the cost of construction and subsequent maintenance.

The headworks erected by the company are of a strong and substantial character (Plate IV.), and the whole scheme shows evidence of careful thought and a desire to have a permanent and efficient system.

As part of their general system the company are taking out a small ditch within the limits of the city of Calgary. The ditch heads in the Elbow River, on the north side of the stream, in the N. E. ¼ of Section 10, Township 24, Range 1, west of 5th Meridian; from there it runs through the grounds of the Calgary Agricultural Society, and then, crossing the stream to the south side by means of a flume, follows close along the south bank of the river passing under the C. P. Ry. bridge and turning sharply to the south extends into Sections 1, 11, 12, 13 and 14, where the water is to be used for irrigation. It is calculated that this small system, which is designed to carry 20 second feet of water, will irrigate about 1,300 acres of bottom land on the sections mentioned, and there is little doubt that, owing to its proximity to the city, the cheapness with which the system is being constructed, and the particularly fine bottoms upon which the water is to be applied, this system will prove of great value as an object lesson to the many persons who visit Calgary, and who are unacquainted with the principle of irrigation.

THE SPRINGBANK IRRIGATION CANAL.

This canal has been projected by the settlers of the Springbank district, which is situated to the west of Calgary and between the Bow and Elbow Rivers, and they hope to be able to build it under the provisions of the North-west Irrigation District Ordinance, a measure passed by the North-west Legislative Assembly at its last session, the provisions of which are fully dealt with further on in these pages.

The proposed canal is about thirty-six miles in length, and is designed to take sufficient water from the Elbow River in Section 4, Township 24, Range 4, west of 5th Meridian, to irrigate some 21,000 acres. Being the first canal projected as a mutual undertaking, under the provisions of the legislation above referred to, the success attending its construction and management will be watched with interest by many other districts similarly situated.

The land to be reclaimed by this scheme is all of good quality, and there is little doubt that the application of water will be attended with success.

IRRIGATION LEGISLATION.

The diversion of water from its natural channels and its use for irrigation, both as regards the original allotment of the available supply between contending applicants, and the subsequent distribution of the water to users thereof, with all its attendant difficulties of riparian rights and other vested interests, has afforded a subject for legislation in all the countries where water is used in this manner; and the laws relating to irrigation, beginning with the earliest periods of history, have increased in number until they now form a respectable library in themselves.

When the necessity for irrigation in our arid region became apparent it was realized that, in the absence of any legal enactments regarding the use of water in this way, an Irrigation Act was a first essential in establishing the principle upon a sound basis.

The matter had received considerable attention prior to 1893 at the hands of some of the officials of the Department of the Interior, and a careful examination of the

existing laws in the different states and territories of the United States, in Australia, and elsewhere where irrigation was practised, had been made, and at the session of the Dominion Parliament in 1893 an Irrigation Act was introduced. This bill received its second reading but was not pushed to a conclusion as it was felt that criticism of its proposed provisions might be obtained from those interested in or informed about the subject, which would enable the bill to be advantageously amended before the next session.

Copies of the bill were therefore distributed to a number of persons likely to be able to offer intelligent criticism or amendment, and as a result many valuable suggestions were obtained. The bill was amended to meet many of the points suggested by those to whom it had been submitted, and was ready for the session of 1894.

In the interval the writer had been sent by the government to the western portion of the United States, where irrigation is practised, for the purpose of examining the systems in operation and inquiring generally into the subject. This investigation embraced the states of Washington, California, Utah and Colorado, and upon returning to headquarters a report was submitted which contained the following suggestions with reference to necessary provisions of the proposed law regarding the distribution and use of water for irrigation :—

"My investigations lead to the conclusion that clear and comprehensive laws should be passed in the infancy of this important national work, and that these laws should be founded on the following principles :—

"1st. The total suppression of all riparian rights in water, so that the same, being vested in the Crown, may be distributed under well considered government control for the benefit of the greatest possible number.

"2nd. That having taken away this individual right, the government are in duty bound to exercise that control of its distribution and use, which, while encouraging the investment of capital in the works necessary for its distribution, will protect the individual, and result in the greatest amount of public good.

"3rd. That water, owing to its use in irrigation, having become a commodity with a defined monetary value, its sale, transfer, and use shall be hedged about with the same safeguards that are enacted regarding real estate or personal property."

The proposed Act was further amended after consideration of the information procured during the above mentioned investigation, and it was finally passed and became law on 23rd July, 1894.

This Act, which is entitled the North-west Irrigation Act, is the foundation upon which our irrigation undertakings are to be based, and, although it is largely founded upon the existing irrigation laws in other countries, it contains some provisions which are radical departures therefrom, and it is desirable that these provisions should be reviewed at some length.

In the North-west Territories the land, with the exception of that which has been granted as subsidies to railway companies or alienated through homestead or pre-emption grants, sales, &c., all belongs to the Crown, and title to any of the water in streams, lakes, springs or other natural channels had only passed from the Crown in so far as the rights of riparian owners were concerned, so the conditions were particularly favourable for the inauguration of a law regarding the diversion and use of the water supply for irrigation.

The investigations into this subject had led to the conclusion that the foundation provision, necessary in an Act of this kind, was that riparian right should be abolished, and the government given a free hand to apportion or distribute the water and control its use in such a way that the greatest good to the greatest number would result therefrom.

It was also recognized from the recorded experience of other countries that the future success of the distribution and use of the water was largely dependent upon intelligent and disinterested government control; the Act as it stands has amply provided for these two necessary conditions.

For purposes of general discussion the Act may be divided under the following heads :—

1. Provisions that the title to water in any stream or other body of water, or in the land forming the bed thereof shall be vested in the Crown, and that this water may be acquired for domestic, irrigation or other purposes in that order of precedence.

2. Provisions for the protection of those having vested rights before the passage of the Act.

3. Declaration of the principle that applications for, and appropriations of, water shall have priority in order of date.

4. Provisions for filing with the government full and complete information of proposed schemes with necessary maps, plans, &c., and of sufficient notice thereof to the public, and that approval of scheme and authority therefor must be obtained before construction can be commenced.

5. Full and complete machinery to enable necessary right of way to be obtained under all conditions.

6. Provisions for priority of right of water granted, and limitation of quantity to amount which constructed works are capable of carrying.

7. Necessary provisions for careful supervision of systems, both during construction and subsequent operation, by government officials, and for settlement of all disputes between consumers and those supplying water, and for supervision of rates to be charged therefor.

8. Establishment of the unit of measurement of flowing water and of quantity.

9. Authority to the government when necessity arises, to take over and operate or otherwise dispose of any works constructed under provisions of the Act.

10. Authority to the government to make all necessary surveys to determine extent and location of irrigable lands, to determine the amount of and location of water supply, to reserve lands for reservoir sites and dispose of the same, and to take any steps necessary to protect sources of water supply and promote the beneficial use of the same.

The Act will of course have to undergo trial, both in its practical application and in the test of its provisions in legal contests which may arise thereunder, before we can speak with any degree of certainty regarding its application to the existing conditions; but in the meantime it may be of interest to note briefly some of the provisions which differ from the enactments regarding the use of water for irrigation in other countries, and to point out those which we consider make our Act a good one, and which it is hoped will enable the available water supply to be utilized for irrigation, without the unfortunate and hampering litigation which has characterized the undertaking elsewhere.

The abolition of riparian rights, and vesting the absolute control of all water in one strong central authority, are the important provisions in the Act. In many of the states in the United States riparian rights have been abolished, and title to the water vested in the commonwealth, but there the vacant lands belong to the federal government, and it is impossible to so combine the land and water, owing to this divided authority, as to secure the most beneficial results therefrom.

The provisions of our Act on the subject of riparian rights will doubtless have to undergo the test of litigation, but assuming that the decision of the courts will be in favour of the Act, there is no doubt that the one central authority being vested with ownership and control of both the land and the water, should make it possible to so administer the two as to secure the greatest possible benefit to the greatest number.

The government having both the land and the water in their control, and it being recognized from the experience of all irrigation countries that there is a great deal more land than the most careful use of the water will reclaim through irrigation, it is right and proper that they should exercise great care in the granting of water rights, and supervision of the use of the available water supply. This is only possible by supervising irrigation undertakings from their inception. To enable it to be done the Act declares that vested rights existing before the passage of the Act shall be recognized, and provides that applications shall have precedence in order of their date of filing, and then enacts provisions for the necessary examination of all schemes, and the filing and consideration of any and all protests, before the right to construct works of any kind is granted. Provision is also made for inspection of the works during construction, and particular notice should be drawn to the very full and complete plans, specifications and general information which must be filed with and receive the approval of the government before the works can be constructed.

In this particular it is also worthy of mention that the provisions for survey and record of the right of way required for canals, ditches, or reservoirs are stringent and

complete. The survey must be made by a duly authorized Dominion land surveyor, and the instructions for both the field work, and returns showing the same, are of that character which will prevent dispute or litigation regarding area or boundaries of land appropriated for the purpose.

The plans required by the Act regarding the engineering portion of the work, which must be approved before construction is begun, are full and comprehensive and are in advance of anything of the kind required from individuals or companies, contemplating the construction of irrigation systems, in any other portion of this continent.

At first sight it might seem that enterprise, and the investment of capital, were being unnecessarily hampered with the restrictions contained in the above mentioned clauses, but there is little doubt that the care exercised through these provisions, in the first distribution of the available water supply, will in the end prove one of the chief factors in the successful and permanent establishment of the systems, on a basis which will enable the distribution of water to be so effected, that each scheme of any size will in time become one of the links of a completed system under which the available water supply will be utilized to the fullest extent in reclaiming arid areas.

The plans and information required to be filed with the government being all prepared in a uniform manner, and giving certain details in each case, can be utilized to supplement the information procured from surveys conducted by the government, and thus in time permit of the issue of complete topographical maps of the arid region.

Among the principal factors in the successful construction of a railway line, navigation canal, irrigation canal, or any other undertaking which necessitates the taking of public or private lands for right of way purposes, is the law which enables this right of way to be acquired in a fair and equitable manner. This we have in Canada in the Railway Act, and it was decided that the best way of providing for like conditions in the Irrigation Act was to make the provisions of the Railway Act, in this behalf, apply to construction of irrigation systems: this has been accomplished by enactment of the provisions summarized under paragraph 5 above, and there is no doubt that the application of these provisions to irrigation enterprise will be found quite as satisfactory as they have been in the case of railways. In this particular our Irrigation Act is very complete, for we are dealing with a question regarding which years of experience, in the shape of results, are available as a guide, and the provisions under which right of way may be acquired, and all disputes regarding values or location of works adjusted, are very comprehensive.

The law regarding priority of title, as enacted by the provision referred to under paragraph 6 above, is practically the same as that existing in all parts of the world where water is used for irrigation, viz., that priority of appropriation of the water constitutes the better title thereto; in our Act this end is arrived at in two ways, it is first provided that applicants for water rights shall have precedence in the order of the date of the applications; and then, assuming that all applications have been granted, it is provided that the license holders shall have priority in the order of the date of their licenses. These provisions seem to contain the conditions necessary to provide good title to the water, and, as the Act further provides effective machinery for the enforcement of this priority by officials of the government, we should have the minimum amount of dispute regarding the division of water among those entitled thereto.

The provisions regarding the control of the division of the water among license holders, and for settlement of disputes between consumers and those supplying water, by a permanent government official, as provided in the sections referred to in paragraph 7 above, is a marked departure from the system in force in the United States: there, duties of this kind are delegated to officials elected by the people for short terms, who must necessarily be subject, in a greater or less degree, to the influences resulting from such a tenure of office. In this particular our Act affords many points of difference from other existing irrigation laws; the centralization of authority regarding the first distribution of the water and its subsequent use under the direct supervision of permanent government officials, the inspection of the proposed schemes in their preliminary stages, with the standing which they acquire from the approval of the scheme by the government, and the inspection of all works during construction so as to provide thoroughly for public safety, are new measures on this continent, only possible probably

under our form of government, but they should result in a minimum of dispute or sharp dealing, and a maximum of benefit to the citizen from the use of the available water supply.

Under the provisions of the Act, outlined in paragraph 9 above, the government are given the right to take over, by process of expropriation, at any time, and operate or otherwise dispose of the works of any company authorized under the Act. This at first sight seems a somewhat drastic measure, but it is a very necessary one if the business of irrigation is to be properly controlled by the Dominion government. Cases will arise where the future prosperity of a whole district might be marred by the refusal of any company to sell at reasonable figures the privileges held by them, or it may be found necessary for the welfare of a particular portion of the country to consolidate scattered systems into one completed whole, and these cases can only be met by the government taking the matter in hand, and, under the powers granted by these provisions, doing what may be deemed best for the greatest number after paying a fair value for the vested rights suppressed.

Finally under the provisions of the Act, referred to in paragraph 10 above, the government take power to make all necessary surveys to determine the extent and location of irrigable lands, amount and location of water supply, and position of available reservoir sites, with power to reserve and dispose of same. These questions will be found fully and exhaustively dealt with in the portion of this report devoted to Canadian irrigation surveys.

In a general sense our Irrigation Act may be said to have been framed to contain the suitable provisions of existing laws on the subject, on this continent, and in Australia, with the additional clauses necessary to affirm, and to carry out the principle, that the water is the property of the Crown, and must be administered and granted with that supervision and care which will result in the greatest good to the greatest number. The possibility of reaching this desirable end is of course greatly strengthened from the fact, already referred to, that the larger portion of the land in the arid region being also the property of the Crown, it will be possible to so combine the land and the water that the best results will accrue therefrom. This may be illustrated by reference to the arrangement entered into between the Government and the Canadian Pacific Railway Company, and sanctioned by an Act passed at the last session of Parliament, by which the railway company are permitted to take their land grant, in portions of the arid region, in blocks with an acreage reservation for roads instead of in alternate sections with road allowances between as provided by our land survey system: this arrangement will of course make it much more easy for them to carry out an extensive scheme of irrigation, and as the water necessary to reclaim these lands can be acquired by them under the provisions of the Irrigation Act they should be able to undertake a large scheme of reclamation under very favourable conditions.

The North-west Irrigation Act will require amendment from time to time to meet new experience and unforeseen cases as they arise, but the groundwork of the legislation being the administration of the land and water by the same authority, any superstructure of amendment built upon this groundwork, if it has in view the extension of the same principle, will serve to strengthen the position and make possible the ultimate conversion of the arid region into a rich and populous part of our territories.

The Act is essentially an enactment for the government of the first distribution of the available water supply, and that subsequent supervision of the systems using this water which may be necessary to provide for public safety, prevent exorbitant charges therefor, and so administer the land and water that the greatest benefit may result therefrom. The Act does not deal in any way with the questions which arise regarding the formation of companies, or other organizations, having in view the construction of irrigation works under its provisions, beyond making provision for a limit of bonded indebtedness.

In framing the Act it was no doubt thought that ample provision was made in the Joint Stock Companies Act, to enable companies to become incorporated and undertake irrigation, on either a large or small scale. There is, however, a class of organization which does not seem to come within the scope of the Joint Stock Companies Act, such as mutual organizations, either of a few neighbouring settlers who can by joint effort

construct a ditch to serve their individual farms, or the greater organization which may include the settlers in a whole district who are willing to pledge their farms and give their work to enable the ditch or canal, upon which so much of their future success depends, to be constructed. To meet cases of the latter kind the Legislative Assembly of the North-west Territories, at their session held in August and September of last year, passed an ordinance entitled

THE IRRIGATION DISTRICT ORDINANCE.

The provisions of this law are destined to have an important bearing upon the future of irrigation in the arid region, and they are deserving of a somewhat close inspection and criticism.

The agitation which led up to the enactment of this ordinance was the outcome of the conditions existing among a number of settlers resident in a portion of Alberta lying west of the city of Calgary, called the Springbank district. The farmers in this district, who for the most part have been devoting themselves to stock raising, have suffered during late years from drought, and have finally come to the conclusion that in irrigation lies their only hope, and as there seemed little prospect of the necessary canal or main ditch being undertaken in the near future as a business enterprise by a company, they felt that some legal enactment was required to enable them to organize so that a mutual effort might be made to meet the necessities of the case. To provide for this case and others of a like kind which will arise, the Irrigation District Ordinance was passed.

This ordinance is framed somewhat on the lines of the "Wright Act" in force in California; its provisions may be divided under the following three distinct heads:

(a.) When any number of residents in a district desire to avail themselves of the provisions of the ordinance they must first make the preliminary surveys to enable them to prepare the plans, memorial, &c., required by the North-west Irrigation Act, and having done this they can petition the Lieutenant Governor for the creation of the district, the petition being accompanied by the plans and memorial referred to.

In these provisions it will be noticed that before the petition can be forwarded it is necessary for some settlers in the proposed district to prove their good faith by providing the amount of money necessary to complete the preliminary surveys to demonstrate the feasibility of the proposed scheme, and as the preliminary plans and information called for by the Irrigation Act are full and complete, it is evident that only those districts which are in earnest are likely to provide the money for these preliminary expenses.

(b.) We now come to the second proceeding under the ordinance. The Lieutenant Governor, having considered the petition and accompanying plans, gives notice of the receipt of the petition in the *Official Gazette*, and, after considering all protests, he, at the end of two weeks, if he finds no substantial objection to the erection of the proposed district, appoints a committee of three of the petitioners to take a vote on the subject.

The ordinance provides full machinery for the taking of this vote and electing the necessary officers, and if the votes decide for the erection of a district, the necessary proclamation is made and the district is ready to proceed to actual construction of irrigation works.

The board which has been elected to manage the business of the district now make application to the Dominion government, as provided by the North-west Irrigation Act, for authority to divert a sufficient quantity of water and to construct the works necessary to utilize the same, and having obtained this they proceed to the third and final operation under the ordinance. Failing to obtain the necessary authorization from the Dominion government within six months from the date of the proclamation erecting the district, as above explained, the district ceases to exist.

(c.) If the necessary authorization has been obtained the board proceed to appoint a competent engineer for the district, and after he has made the necessary detailed surveys to enable him to estimate the cost of the proposed works, the land to be benefited thereby is assessed for the amount required to construct and maintain the work, and a

by-law authorizing the board to provide this amount by a loan upon the credit of the real estate comprised within the district, is submitted; if the by-law carries, the money is raised and construction proceeded with and the works necessary to supply the water completed; if it fails to carry, the facts are reported to the Lieutenant Governor and the district ceases to exist.

The foregoing remarks will serve as a general outline of the ordinance, some of its provisions are however deserving of more extended notice.

The provisions regarding the preliminary surveys before the petition can be made to the Lieutenant Governor, are probably the greatest safeguard against abuses under this ordinance which could be provided, for it is not likely that any number of residents will find some hundreds of dollars to make these surveys and procure this information, unless the scheme is based on the necessities of the district, and is likely to receive the support of a majority of the residents; the applicants also have to take the chances of adverse criticism by the Lieutenant Governor, and finally are entirely dependent upon the Dominion Government for a grant of the water required, before obtaining which they are called upon to prove the feasibility of their scheme and their good faith by filing all the detailed plans and information required by the North-west Irrigation Act, and, as has been explained in these pages, the provisions of the Act in this particular are very far reaching and complete. It is therefore probable that this ordinance will only be taken advantage of by those who are going into the undertaking in good faith and with a certainty that the proposed works being feasible and required, will receive the support of the majority of the land owners in the district, and of the Dominion and Territorial governments. In this particular the ordinance is a great improvement upon the Californian law above referred to. In that law there is no supervision by the government of any proposed scheme, the question affecting the creation of districts being delegated to county officials.

The initiatory steps provided by this ordinance seem to be complete and framed in such a way as to minimize the probability of the law being made use of to propose or float bogus or undesirable schemes.

The machinery for the erection of the district, the election of officers, and the voting upon by-laws, and other questions to be decided by the voice of the voters, has been based upon, and follows very closely, the lines of the ordinance under which school districts are erected, officers elected and money raised; these provisions are the outcome of some years' experience, and have been found workable and full enough to meet the existing conditions.

The exceptional duties delegated to the district engineer under the ordinance are worthy of notice. The engineer makes the necessary detailed surveys to enable him to project the completed works, and estimate their cost, both for construction and maintenance, and he then prepares the assessment roll under which the amount necessary to construct and maintain the works is to be raised. The whole proceedings from the projection of the scheme to the completion of the assessment roll and notification of the assessment to property owners are delegated to the engineer. If irrigation districts, formed under the provisions of this ordinance, provide themselves with efficient and reliable engineers, there is no doubt that the above arrangement will be found to work advantageously, for it obviates all complications regarding acreages or values as between the assessor and the engineer, and it is reasonable to suppose that the engineer who lays out the work is the most competent man to make an assessment of the lands benefitted thereby. This arrangement also has the merit of simplicity and economy in that it does away with any appointment of extra staff of assessors and assistants, and leaves the whole matter as between the board and the engineer.

The provisions of the ordinance regarding issue of debentures to provide money to construct the system, and assessment for sinking fund to meet these debentures and provide for maintenance of the works are deserving of some attention. These provisions are really the vital points of the legislation, for if they are not framed in such a manner that the money needed can be readily procured thereunder, and at the same time provide necessary and reasonable limitations in the bonded debt, and the annual tax upon the land for management and maintenance, the ordinance will not only prove useless to the people who desire to avail themselves of its provisions, but will be calculated to promote

useless expenditures on preliminary surveys and examinations, and give rise to very false hopes and expectations. The provisions are briefly as follows:—

The land to be benefited by the construction of any irrigation works under the ordinance can be taxed to the limit of $6 per acre for cost of construction, and up to $1 per annum for maintenance and interest and sinking fund. The principal sum of $6 must be paid off in twenty years.

For the purposes of present discussion it is safe to assume that any scheme which will require a tax of more than $6 per acre for its construction is not a feasible or desirable one, for the crops which can be raised in the larger portion of our arid region will not warrant any greater if as great a tax as $6 per acre. If the debentures issued to raise this amount bear interest at 6 per cent per annum, which seems reasonable interest under the circumstances, it will require an annual tax of 67 cents per acre to provide for interest and sinking fund, leaving only 43 cents per acre, per annum, to meet charges of management and maintenance.

The latter sum may possibly be found sufficient if the greatest care and intelligence are exercised in both management and repairs; but to carry on irrigation for this sum will mean that our annual tax for water will be much less than in the United States, where the average annual cost for these charges amounts to 99 cents per acre.

From these figures it will be seen that the feasibility of any scheme costing $6 per acre to construct is very doubtful, and it may safely be assumed that a first charge of from $4.50 to $5 per acre is about the outside figure at which districts should undertake to construct irrigation systems. The average cost for bringing water to the land in the United States is about $8.15 per acre. However, as systems which are likely to be undertaken in the immediate future under provisions of this ordinance will have the advantage of cheap right of way, and an absence of conflicts regarding vested rights, their construction should be possible within the limits of expenditure mentioned.

In the limitation of the debenture debt to $6 per acre, and the annual tax to $1 per acre, as provided by section 42 of the ordinance, are to be found the safeguards which bring this enactment within the bounds of reasonable legislation, for it may with safety be asserted that any law which authorized an expenditure greater than the average cost of like undertakings in the United States, where long years of experience have been available both in construction and management, would retard rather than advance the prosperity of our country.

The Wright Act of California, referred to above, does not contain provisions limiting the first charge or annual tax, and it is doubtless owing to the abuses which have arisen owing to the want of such limitations, that the Act in question has been made use of to aid questionable schemes and justify the severe criticism to which it is now subjected owing to the unjustifiable extent to which bonds have been issued in some of the districts created under its provisions.

The value of the North-west Irrigation District Ordinance, to the settlers who may desire to avail themselves of its provisions, is greatly discounted by the doubt which exists as to the power of the North-west Legislative Assembly to enact such a measure, for even if the legislation is allowed by the Dominion Government, the persons likely to buy the debentures issued under its provisions are sure to want a ruling of the courts upon this point before buying, or will only buy at a price which will mean a large discount on their par value. In this connection it may be of interest to note that a somewhat similar doubt regarding the legality of the provisions of the Wright Act, and some years' delay in securing a ruling of the Federal Supreme Court thereon, has seriously detracted from its value to the people, and has caused bonds issued thereunder to be looked upon with some suspicion as a safe or profitable investment.

PART II.

CANADIAN IRRIGATION SURVEYS.

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From the earliest stages of the movement towards irrigation in the arid region it was apparent that much would require to be done by the government towards the collection of the necessary data regarding the water supply, and the areas upon which it could be utilized. There was also the further necessity of acquiring a correct knowledge of the general topographical and hydrographical features of the country, so that an intelligent control might be exercised in the application of the available water supply for the reclamation of unproductive areas.

A comprehensive law regarding the diversion and use of the available water supply in the arid region having been provided, and the government having undertaken the careful supervision of such diversion and use, it was necessary to proceed without delay to locate and determine the volume of the available water supply and to make a general topographical survey of the arid region.

Some time prior to the passage of the Irrigation Act the question of the most desirable scheme upon which to base these surveys had received careful consideration, and early in December, 1893, a report was submitted by the writer containing an outline of a proposed system for a general irrigation survey.

The objects in view and the information to be obtained by this survey were set forth under the following heads :—

"1st. The providing of such information regarding the contour of the country, and the source and quantity of the water supply and the possible and proper distribution of the same as will enable the government to exercise that control and supervision of its use in irrigation which is so necessary to prevent disputes and establish the undertaking on a permanent and sound basis.

"2nd. The determination of the topography and elevations with reference to the land survey system, and the establishment of permanent points of reference regarding the same so that the information procured will be available for use by surveyors and engineers as a basis for their detailed surveys for the construction of canals, ditches or reservoirs.

"3rd. The location and segregation of proper sites for the construction of reservoirs, and providing the information needed by the government in dealing with such sites.

"4th. The issue of such plans as will enable all irrigation surveys to be referred to common and well established land marks and a common datum for elevations, so that each private survey, based upon the framework provided by the government plans, may become a part of the whole, and in time enable an accurate topographical map of the district to be issued.

"In making a survey of this kind the government procure that general data which is properly of a national character and beyond the limits of surveys made for particular canals or ditches, and are enabled therewith to determine the limits of drainage basins and prevent the diverting of water from the district to which it properly belongs, and the attempt, which has been so disastrous both to investors and farmers at many points in the United States, to bring more land under irrigation in a certain district than its water supply would warrant."

The Canadian irrigation surveys performed during the past season were based upon the scheme submitted in December, 1893, and had in view the procuring of the information referred to above; it is therefore necessary, before proceeding to discuss the result of the actual field operations, that some space should be devoted to an exemplification of the system under which these surveys are being made, and the facts which led to the adoption of this system as being best suited to the necessities of the case.

The general outline of the scheme is as follows, the special features being dealt with in detail in their proper order:—

The arid region is divided into rectangular blocks by following the base lines and township outlines of the land survey system (*see* map). These blocks vary in size from four townships, or 144 square miles, in the broken or foothill portion of the region, to sixteen townships or 576 square miles, in the open and gently rolling portions.

Along the lines bounding the blocks careful levels are run with 18-inch Y levels and 17-foot rods, the elevations being determined at every 330 feet in gently rolling country, and at sufficient intervals to determine 50 foot contours where country is broken; the general topography along these lines is noted from careful chainage with steel-band chain, and at the same time the five chain or 330-foot intervals are marked with small wooden pins numbered consecutively, 1,2, 3, 4, 5, &c., for each section side.

At township corners, and at points where streams, railways or other prominent features are intersected by the lines run, permanent bench marks are established by driving an iron bar, one and one-half inches in diameter and five feet long, into the ground within ten inches of its top and marking these bars with steel dies. Permanent bench marks are also established in all cities, towns or villages in the district and at points where fixed rock and other permanent natural features are met with.

The topography for a distance of from one to six miles on each side of the line run as above described, is determined by a topographer, who measures his elevations with an aneroid barometer, using the determined elevations along the block line as a daily basis of commencement and a check for his work, and measuring the distances by pacing or by micrometer or odometer.

All streams intersected on the lines are carefully cross-sectioned, and the discharge at that date determined by use of current meter; sufficient data is procured at the same time by measurement of the high water and flood level cross-sections, and determination of the slope of the stream and nature of its bottom and banks, to permit of an approximate determination of the discharge at these stages of water in the stream. All springs are gauged, and the area and volume of all lakes carefully measured.

The sites suitable for storage reservoirs in the vicinity of the lines run as outlines of the blocks, or in the interior of the blocks, are carefully located and surveyed so that their capacity and their elevation, with reference to the surrounding country, may be determined.

The portion of the arid district which lies within the foothills and very broken country adjoining and on the eastern slope of the Rocky Mountains, will be surveyed and mapped by the phototopographical method, and these surveys tied in to those made as above outlined so that the whole district may be properly shown on maps issued.

It will be noticed from the foregoing that the work to be undertaken by the Canadian irrigation survey covers many widely different branches of both engineering and surveying. We have to deal with the questions of geographical and topographical surveying, hydraulic engineering and the structural branches of civil engineering.

The work under these heads, as carried out in accordance with the system outlined above, requires some detailed explanation.

TOPOGRAPHICAL WORK.

The results obtained from the topographical survey, properly assembled and issued in the shape of plans and reports, are the groundwork upon which all our superstructure of hydraulic investigation, and actual location of reclamation works, must be built up, and the system which permits of these results being collected and assembled in the cheapest manner consistent with the object in view, is the one which should commend itself.

A topographical survey is defined as "one that gives not only the geographical positions of points and objects on the surface of the ground, but also furnishes the data from which the character of the surface may be delineated with respect to the relative elevations or depressions."

To make such a survey it is necessary to measure not only distance and direction, but also relative elevations, and the character of the survey depends upon the frequency and accuracy with which these measures are determined.

Prior to the inception of our irrigation surveys the greater part of the arid region had been covered by surveys performed under the land surveys system, and it was decided to use the latter to supply the outline of distance and direction required as the foundation for our further topographical investigations.

The system upon which the land surveys have been performed is based upon that inaugurated in the United States many years ago; its main features consist of rectangular townships containing thirty-six sections of one square mile, or 640 acres each, the outlines of which are north and south and east and west. These townships are numbered uniformly north from the 49th parallel of latitude or International Boundary, and lie in ranges numbered west from initial meridians which are situated four degrees apart. These surveys were effected by first running the base lines, which are situated twenty-four miles or four townships apart, from one initial meridian to the next, and then dividing up the belt between these bases by running the township outlines north and south from the base lines; the intermediate east and west township outlines are then surveyed, and finally the townships subdivided into sections.

These three different kinds of survey are performed as three distinct and separate operations by different classes of surveyors, all of whom have to prove their qualifications by serving under articles for a number of years, and then passing a strict examination on subjects presented by law, and before a board of examiners appointed by law. In the carrying out of the first and second great care has been exercised; the lines have in all cases been run with the best class of modern transit, and the azimuth has been carefully determined by stellar observation, the average error in azimuth on base and block lines being within ten seconds. The measurement of length has invariably been made with steel band chains, all lengths on base lines being chained twice by different sets of chainmen, who were expected to check each other within $1\frac{1}{2}$ links, or 12 inches in each mile.

The intermediate township outlines were surveyed in the same careful manner and the limits of error both in azimuth and length are small.

Finally the subdivision of the townships into sections has been performed under careful inspection, and within well defined limits of error, the lines being run with transit and chainage made with steel band chains.

In surveying all these different lines the main topographical features have been carefully noted, and the large scale maps which have been issued, in connection with the land surveys, show in a very accurate manner the principal topography on all the lines run.

These surveys have been clearly defined on the ground, the township and section corners being perpetuated by marking them with iron bars driven firmly into the ground, with the addition of earth mounds and pits.

We claim for our land surveys the best system, the most accurate surveying, and the most permanent marking of any land survey system extant, and it is therefore proper that any further work with the object of adding to the topographical information furnished by the land surveys, should be based thereon, particularly as the permanent marks referred to make the most convenient points of reference for the contours or other topographical information which may be added by the irrigation surveys.

The framework being thus provided upon a simple and accurate basis, we were not called upon, in the inception of our irrigation surveys, to consider any questions of triangulation, or methods of geodetic surveying, to locate the permanent topographical features or establish points of departure, and the problem resolved itself into a question of accurately fixing the elevations of the permanent features on certain of the township outlines by careful levelling, and then filling in the interior topography in such a manner that the contours could be shown on the maps issued.

The elevations on the outlines of blocks are determined, as has been explained, by using 18-inch Y levels and 17-foot rods reading to hundredths, the position of the topographical features on these lines, as shown by the land survey maps, being checked by rechainage of the lines, so that we really have three measurements, with steel band chains, to fix the position of these features. The accuracy with which the elevations are determined will be best exemplified by the following schedule of closings, which shows closings by levellers on divisions A and B, during the past season, upon bench marks placed by one or both divisions.

SCHEDULE showing closings of levels run by Divisions A and B.

Division.	B. M. No.		No. of Miles run.	Difference at Closing.
	From	To		
A	3	10	73	0·67 feet.
A	3	3	97	0·52 "
A and B	7	7	48	0·48 "
A and B	11	T.B.M.	73	0·69 "
A and B.	T.B.M.	T.B.M.	62	0·66 "
A and B	3	5	48	1·40 "
B	T.B.M.	T.B.M.	86	1·30 "
*B	59	59	86	4·80 "
B	5	7	8	0·09 "

* Probably due to exceptionally rough country and prevailing high winds.

Two or three methods of accomplishing the general topographical work were available, but after consideration of the merits of each, the system was adopted which accepted the position of main topographical features on section boundaries as given by the land survey system, which divided the country into blocks of one mile square, and of filling in these blocks by traverse lines run along main contours from section boundary to section boundary, and determining elevations with the aneroid barometer, using as a base for such elevations the levels run as above described along township outlines.

The field work is performed as follows, being modified to meet particular cases as they present themselves. The topographer accompanies the party engaged in carrying along the chainage and levels on the block outlines until some prominent feature, such as a stream, valley, well defined basin or hill is intersected, he then starts on an observed course from the outline being run, taking his elevation from some fixed point on this line and makes a traverse to determine location of main contours of the feature in question, checking his position by reference to the section corners adjacent to the feature being followed, and reading his barometer at all points of marked change in elevation. The work as he progresses is sketched on cross section sheets, and his elevations checked by closing in on some known elevation as determined by the line levels. The distances are measured by pacing, or with micrometer or odometer, and as these are checked every mile at the intersection of each section boundary, they are found sufficiently accurate to permit of location of the contours as closely as they can be plotted.

The advantages offered by this system are rapidity and cheapness, and when it is remembered that the position in latitude and longitude of all prominent topographical features have been previously determined by actual measurement on the outline of each block of one mile square by the land surveys, the measurement of interior elevations with barometer should provide sufficient additional data to permit of a very fair topographical map being issued.

The barometers used were made by Dolland & Co., of London, England, after the pattern of those manufactured by the same firm for the East Indian Trigonometrical Survey, they are divided on main arc to show differences of elevation of twenty feet and read with a vernier to two feet. The results obtained with these instruments were very satisfactory; there is of course an element of uncertainty in elevations determined in this way owing to the varying atmospheric conditions under which they are used, but the constant check offered by the main line of levels permits of their use within reasonable limits of error.

When sites suitable for reservoirs or the storage of water are met with, their position and area are fixed with reference to the land sub-division surveys, and their capacity measured by cross-section in such a way as to permit of the volume of water to be held therein being approximately determined.

The elevations at prominent points are marked for future reference by engineers making use of the information afforded by these general surveys, by placing permanent

bench marks of the character previously described. The position of these bench marks is referred to the land system surveys, so that they are readily discoverable by any one desiring to use them. The location and elevation of all bench marks placed during the past year are shown in the following schedule.

DIVISION A.

SCHEDULE of Bench Marks placed during the season of 1894, with particulars of location and elevation. Datum—sea level.

No. of B.M.	Location.	Section.	Township.	Range.	West of Meridian	Description.	Elevation above Sea.
							Feet.
1	N.W. corner of Calgary Post Office	15	24	1	5	An iron plug set into the second course of stone and marked $\overset{\uparrow}{\text{B M}}$ 1	3401·00
2	S.E. corner of Calgary Court House	16	24	1	5	An iron plug set into the second course of stone and marked $\overset{\uparrow}{\text{B M}}$ 2	3406·00
3A	On S. side of chimney of pump-house, Calgary waterworks	16	24	1	5	Point on second course of stone marked $\overset{\uparrow}{}$	3410·00
3	N.E. corner of	36	24	2	5	Iron post marked $\overset{\uparrow}{}$ B M 3	3607·60
4	On Nose Hill, 2 chains N. of point 20 chains E. of N.W. corner	31	24	1	5	A point on a large sandstone outcrop marked $\overset{\uparrow}{}$ B M 4	3481·40
6	10 chains W. of N.E. corner	34	24	2	5	Iron post marked $\overset{\uparrow}{}$ B M 6	3468·40
8	N.E. corner	36	24	3	5	do do 8	3784·15
10	do	36	24	4	5	do do 10	3959·85
12	35·27 chains W. of N.E. corner	31	24	4	5	do do 12	3962·50
14	1 chain N.W. of ¼ sec., cor. on E. boundary	13	24	4	5	do do 14	3873·40
16	N.E. corner	36	22	4	5	do do 16	4514·60
18	do	24	22	4	5	do do 18	3965·25
20	do	4	22	3	5	do do 20	3890·60
22	20 feet S. of N.E. corner	2	21	3	5	do do 22	3817·10
24	Intersection of W. boundary of the right of way of the C. & E. RR. and the N. boundary	35	20	1	5	do do 24	3473·50
26	10 chains E. of N.E. corner	31	20	28	4	do do 26	3213·70
28	N.E. corner	36	20	28	4	do do 28	3540·75
30	do	36	19	29	4	do do 30	3398·65
32	On S.E. corner stone of High River Trading Co.'s store at High River	6	19	28	4	Point indicated on stone of fifth course and marked B M 32	3371·25
34	S.E. corner	1	19	28	4	Iron post marked $\overset{\uparrow}{}$ B M 34	3267·85
36	N.E. corner	36	21	28	4	do do 36	3304·40
38	Intersection of the S. boundary of right of way of C. P. RR. and the E. boundary	13	23	28	4	do do 38	3330·10
40	N.E. corner	36	24	28	4	do do 40	3277·70
42	do	36	23	26	4	do do 42	3213·65
44	Two feet N. of the S.E. corner of station grounds at Shepherd and on the E. boundary	13	23	29	4	do do 44	3338·50
46	N.E. corner	36	24	29	4	do do 46	3512·45
48	do	34	24	1	5	do do 48	3405·40
50	do	36	26	2	5	do do 50	3871·20
52	Intersection of the W. boundary of the right of way of the C. & E. RR. and the N. boundary	35	28	1	5	do do 52	3562·60
54	N.E. corner	36	28	28	4	do do 54	3166·00
56	45 feet N.W. of the point marking 5 chains E. of the N.E. corner	33	28	28	4	Point indicated on a large ledge of sandstone and marked $\overset{\uparrow}{}$ B M.	3137·05
58	N.E. corner	36	28	2	5	Iron post marked $\overset{\uparrow}{}$ B M 58	3744·60
60	20 feet S. of the point marking 6 chains W. of the N.E. corner	36	28	3	5	Point indicated on a ledge of sandstone and marked $\overset{\uparrow}{}$ B M 60	3608·50
62	N.E. corner	36	28	4	5	Iron post marked $\overset{\uparrow}{}$ B M 62	3921·25
64	¼ sec. mound on N. boundary	33	28	4	5	do do 64	3839·00
66	N.E. corner	36	26	4	5	do do 66	4214·45
68	¼ sec. mound on E. boundary	25	25	4	5	do do 68	3642·30

DIVISION B.

SCHEDULE of Bench Marks established during the season of 1894 with particulars of location and elevation. Datum—sea level.

No. of B.M.	Location.	Section.	Township.	Range.	Init. Merid.	Description.	Elevation above sea level. Feet.	Tenths.
1	N.W. corner of Calgary post office....	15	24	1	5	Iron plate set in 2nd course....	3401	00
2	S.E. corner of Calgary court house.....	16	24	1	5	do do	3406	00
3A	Chimney of Calgary pump house.....	16	24	1	5	Point ($\overset{3}{\uparrow}$) cut on 2nd course.....	3410	00
3	At N.E. corner.....	36	24	2	5	Top of iron bar, marked B.M....	3607	60
5	52·17 chains S. of N.E. corner (83 ft. S. of Elbow River, on E. boundary, Sarcee, I. R.)	25	23	2	5	do do B.M....	3490	02
7	35·00 chains S. of N.E. corner (13 ft. E. of Fish Creek, on E. boundary, Sarcee, I.R.)	1	23	2	5	do do B.M....	3488	15
9	25·00 chains S. of N.E. corner (26 ft. S. of Pine Creek, on E. boundary, sec. 1.)	1	22	2	5	do do B.M....	3538	45
11	At N.E. corner.....	36	20	2	5	do do B.M....	3799	71
13	49·00 chains S. of N.E. corner (50 ft. S. of Sheep Creek, on E. boundary, sec. 25.)	25	20	2	5	do do B.M....	3609	80
15	55·00 chains S. of N.E. corner (33 ft. W. of E. boundary, sec. 1.)	1	18	2	5	Highest point on sandstone slab..	3694	61
17	47·05 chains S. of N.E. corner (10 ft. E. of E. boundary, sec. 36.)	36	17	2	5	Point ($\overset{17}{\uparrow}$) on sandstone slab.....	373	73
19	20·00 chains W. of N.E. corner (75 ft. W. of S. Fork of Highwood River, on N. boundary, sec. 33.)	33	16	2	5	Top of iron bar, marked B.M....	3974	60
21	At N.E. corner.....	36	16	2	5	do do B.M. ..	4403	52
23	11·98 chains W. of N.E. corner (74 ft. W. of centre of Mosquito Creek, on N. boundary, sec. 35.)	35	16	29	4	do do B.M....	3342	20
25	4·81 chains E. of N.E. corner (50 ft. from centre of C. and E. Ry. track, on N. boundary, sec. 32.)	31	16	28	4	do do B.M....	3352	60
27	10·50 chains S. of N.E. corner (105 ft. N. of centre of Mosquito Creek, on E. boundary, sec. 12.)	12	16	28	4	do do B.M....	3277	02
29	1·43 chains N. of N.E. corner (50 ft. from centre of C. and E. Ry. track, on E. boundary, sec. 36.)	25	15	28	4	do do B.M....	3344	63
31	20·05 chains W. of N.E. corner (183 ft. W. from Little Bow River, on N. boundary, sec. 31.)	31	16	26	4	do do B.M....	3174	08
33	At N.E. corner (beside township corner bar.)	36	16	26	4	do do B.M....	3315	10
35	5·00 chains S. of N.E. corner (89 ft. N. from centre of Little Bow River, on E. boundary, sec. 12.)	12	15	26	4	do do B.M....	3079	60
37	At N.E. corner (beside wooden post at township corner.)	36	12	26	4	do do B.M....	3196	80
39	At N.E. corner.....	12	9	26	4	do do B.M....	3060	20
41	do do	36	5	26	4	do do B.M....	3338	40
43	do do (at corner located by Indian Reserve surveys.)	36	4	27	4	do do B.M....	3495	70

SCHEDULE of Bench Marks established during the season of 1894, &c.—*Continued.*

No. of B. M.	Location.	Section.	Township.	Range.	Init. Merid.	Description.	Elevation above sea level. Feet.	Tenths.
45	At S.E. corner	1	3	28	4	Top of iron bar, marked B.M. 45	4138	10
47	do do	1	3	29	4	do do B.M. 47	4352	80
49	25·00 chains S. of N.E. corner (on E. boundary, sec. 36, opposite J. Nelson's dwelling house.)	36	2	26	4	do do B.M. 49	3793	10
51	At S.E. corner (120 ft. N. of St. Mary's River.)	6	1	25	4	do do B.M. 51	4136	50
53	On S. boundary of township (215 ft. E. of N. branch of Milk River.)	..	1	23	4	do do B.M. 53	4131	40
55	At S.E. corner of township (this corner not established—located by measurement from S.E. corner, Tp. 1-24-4.)	..	1	23	4	do do B.M. 55	4595	10
57	At N.E. corner	36	4	23	4	do do B.M. 57	3407	80
59	do do	34	4	24	4	do do B.M. 59	3600	00
61	do do	36	4	20	4	Top of tp. cor. bar do B.M. 61	3411	40
63	do do	36	4	19	4	do do B.M. 63	3361	60
65	do do	36	4	18	4	do do B.M. 65	3179	80
67	41·00 chains N. of N.E. corner (1131 ft. N. of St. Mary's River, on E. boundary, sec. 25.)	24	6	23	4	Top of iron bar do B.M. 67	2998	90
69	40·00 chains S. of N.E. corner (on E. boundary, sec. 25, at ¼-sec. corner.)	25	8	23	4	do do B.M. 69	2765	20
71	At N.E. corner (153 ft. W. of Belly River.)	35	8	22	4	do do B.M. 71	2676	80
73	At ¼-sec. corner, on N. boundary of	33	8	21	4	do do B.M. 73	2978	40
75	On N.E. corner of Lethbridge court house (92 ft. S. of N. boundary, N.E. ¼, sec. 31.)	31	8	21	4	Cor. stone, 2nd course, B.M. 75	2958	80=elevation of B.M. 77
77	At ¼-sec. corner, on N. boundary of	33	8	24	4	Top of iron bar, marked B.M. 77	2956	20
79	At N.E. corner	34	8	26	4	Top of iron bar at S.E. cor. of N.W.M. Police Res., marked B.M. 79	3100	50
81	39·05 chains W. of N.E. corner (at intersection of N. boundary, sec. 33, with E. limit of Pincer Creek trail.)	33	8	26	4	Top of iron bar, marked B.M. 81	3157	80
83	At station 52, surveyed trail, Macleod to Pincer Creek (in centre between pits.)	7	7	28	4	do do B.M. 83	3355	70
85	At station 55, surveyed trail, Macleod to Pincer Creek (in centre between pits.)	12	7	29	4	do do B.M. 85	3359	40
87	At N.E. corner	36	12	28	4	do do B.M. 87	3338	70

HYDRAULIC INVESTIGATION.

In undertaking an investigation of the water supply of the arid region we were confronted with many problems which have interested hydraulic and irrigation engineers throughout the world, but are comparatively new in Canada.

To ascertain, with even a fair degree of accuracy, the factors necessary to a close approximation of the available water supply, and the area of arid country which can be reclaimed thereby, entails investigations which may be summarized under the following heads :—

(a) The measurement of the daily discharge of streams.

(b) The determination of the volume of water in lakes, marshes or other bodies of still water.

(c) The measurement of the daily discharges of springs.

(d) The determination of the rate of evaporation under varying conditions, and of the probable run off from any catchment area.

(e) The fixing of the "duty" of water, which involves a consideration of climatic conditions and character of the soil upon which it is to be used, and finally of the kind of crops to be raised by the artificial application of water.

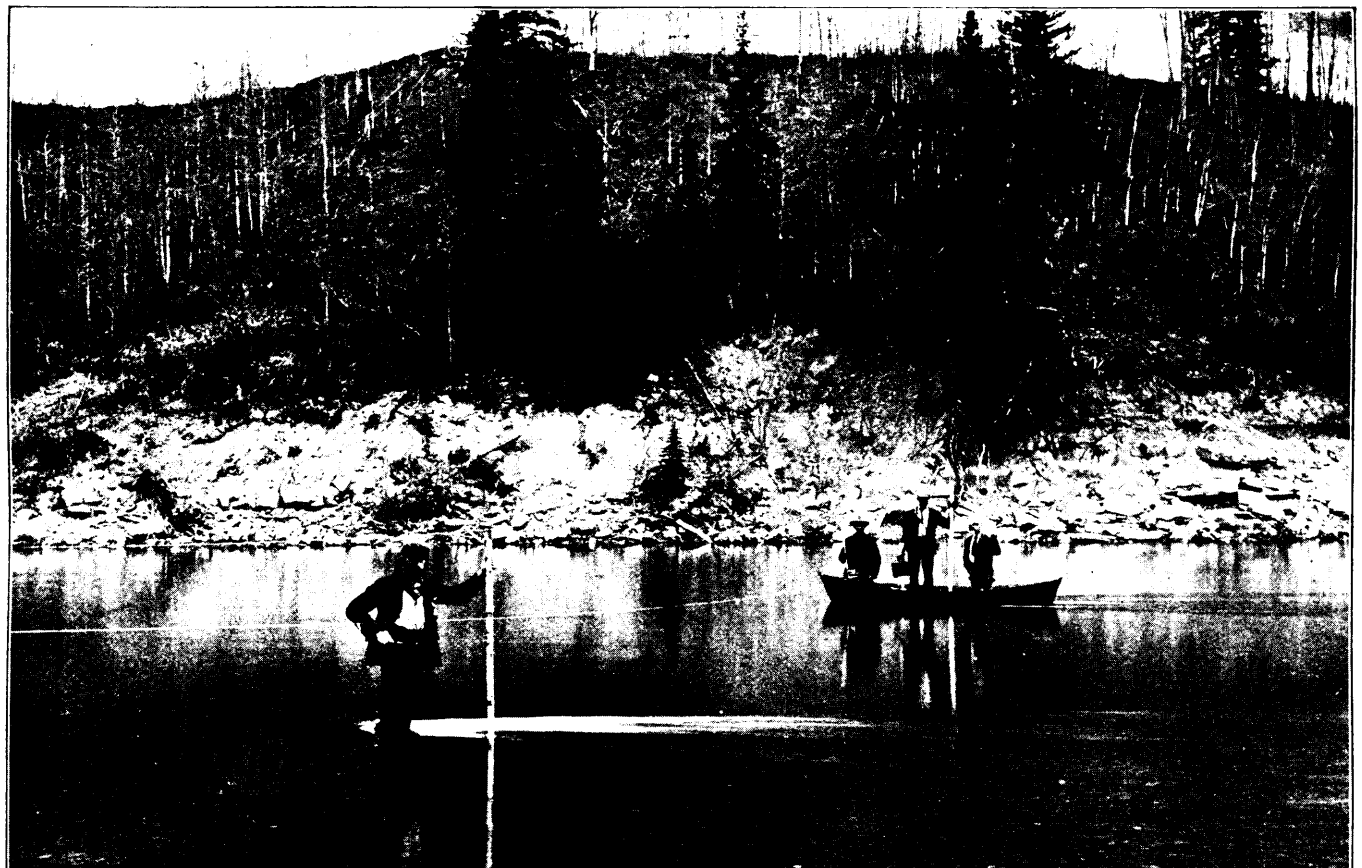
To obtain accurate data upon which to base deductions under these different heads it is evident that the observations should extend over a considerable period of time, and that they be accurately and regularly made. With the staff and instruments available for field work during the past year it was at once apparent that we could not attempt anything like regular or systematic observations, and it was therefore necessary to devote our energies to such scattered and partial investigations as would supply general information upon which to base an approximate estimate of the available water supply. This we endeavoured to accomplish in the following manner :—

All the streams within the district covered by last year's operations were carefully cross-sectioned at different points in their course, and the discharge at date of cross-section determined by use of current meters; at the same time the area of high water and flood discharge cross-sections were measured, and sufficient data procured, regarding slope of stream and character of bottom and banks, to enable the discharge at these stages of water to be approximately determined. The volume of water in lakes or other bodies of still water was measured by survey of the boundaries and determination of depths by sounding, and discharge of springs was determined by measurement of flow during certain periods of time.

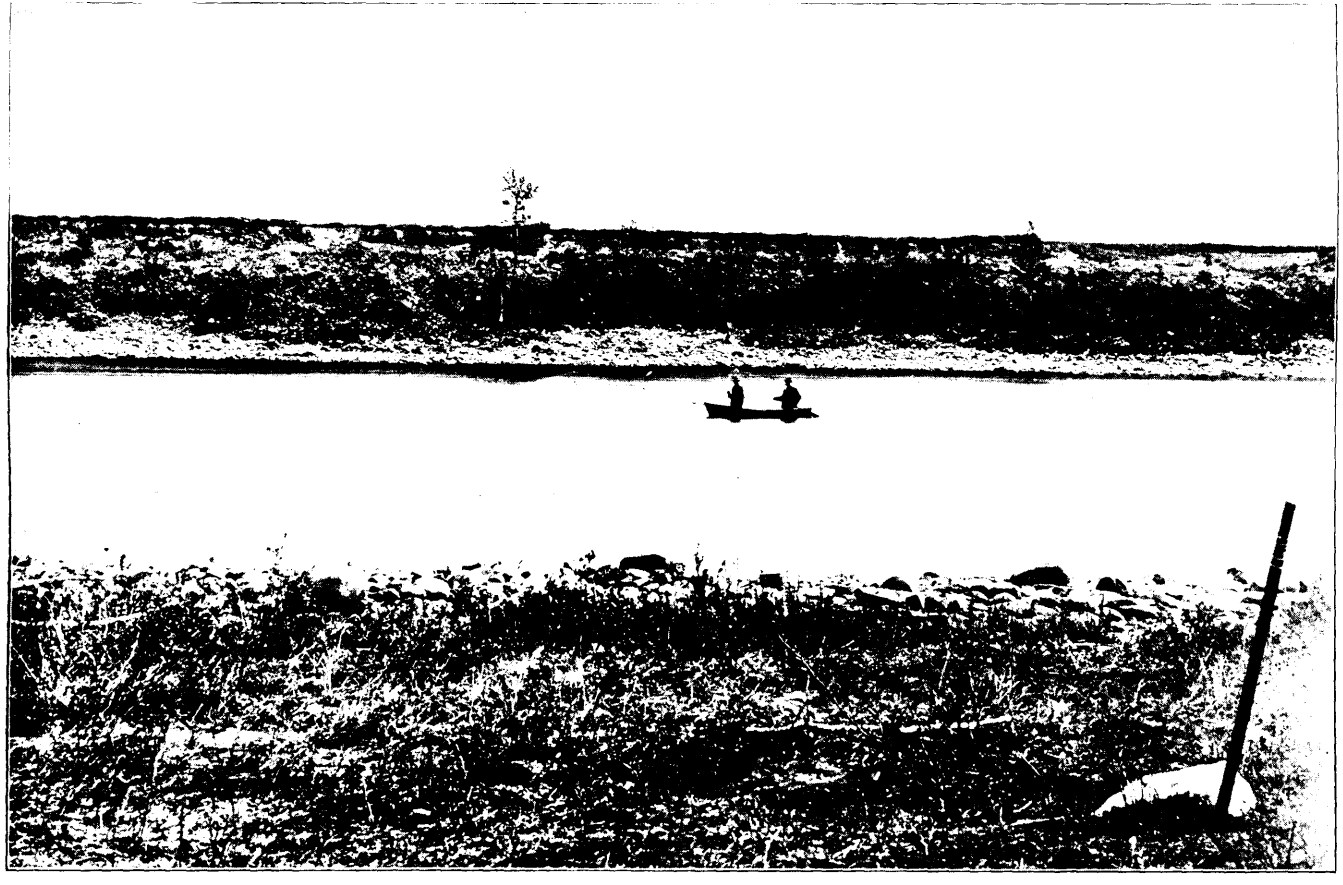
Many instruments have been devised, and many systems tried by hydraulic engineers throughout the world for determining the discharge of, or, as it is commonly called, gauging streams. Isolated measurements, when made with the best instruments and under the most perfect system, are only of value as determining existing conditions at that particular date, and, unless combined with other groups of observations at widely different dates, with the necessary additional information furnished by a daily record of the rise and fall of water in the stream, they can only be said to establish certain approximate quantities within reasonable limits of accuracy.

Our system of measuring discharges of streams, although based upon the methods used elsewhere, was largely the outcome of experiments tried on the Bow River near Calgary in the early part of the season's operations. The appliances used were of necessity light so as to be easily transportable, and at the same time had to be strong, for in dealing with large mountain streams in high stages of water the lives of the observers are often dependent upon the stability of the boat used, or the strength of the tackle controlling the same.

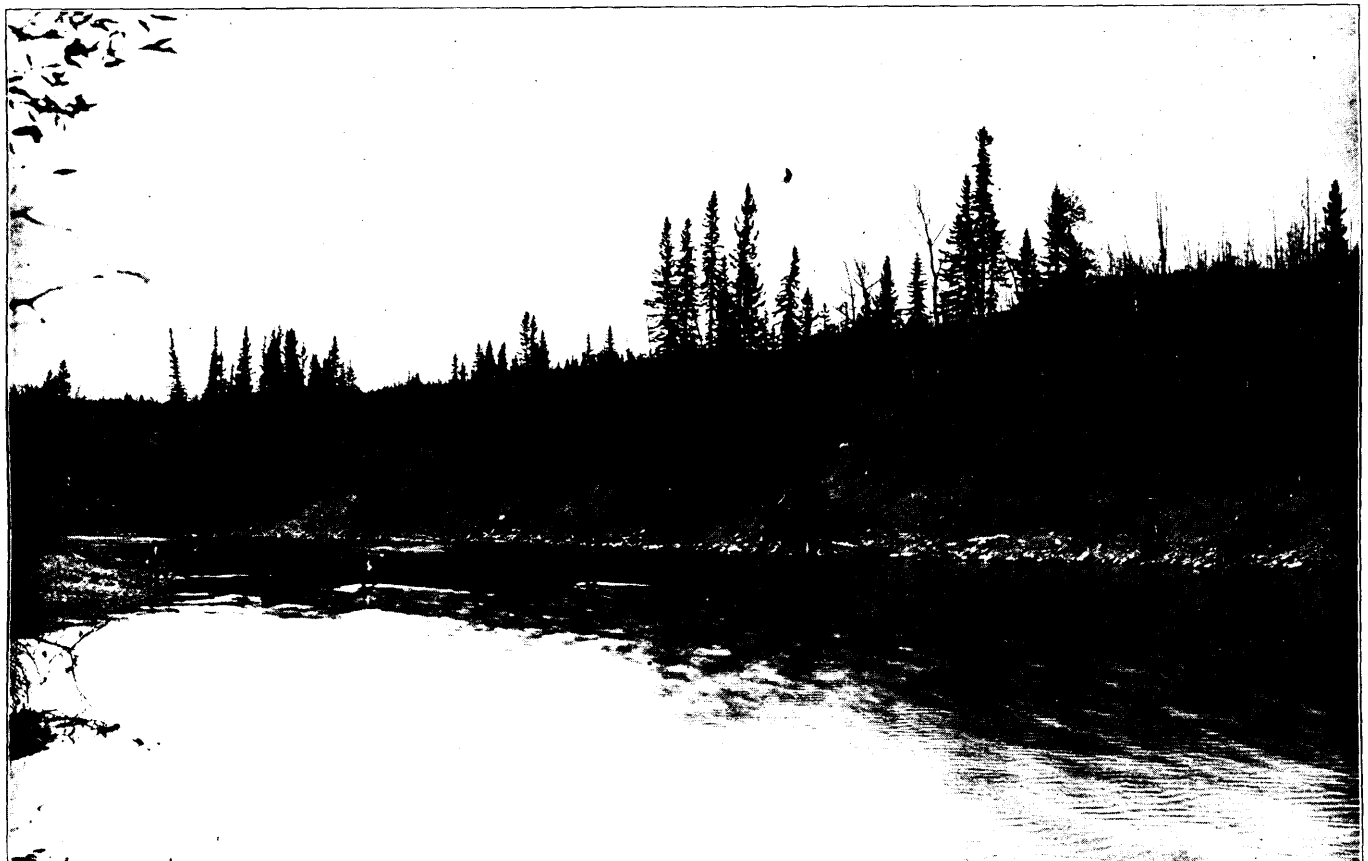
The method followed will be readily understood from a short account of the field operations, with the accompanying illustrations of observers at work. (See Plates VI., VII., VIII.) A point on the stream is selected where the channel is straight for some distance above and below the proposed cross-section, where the stream is unobstructed and the fall regular, and where the marks of high water and flood discharge can be clearly distinguished or located. The line of cross-section is defined by stretching a steel wire across the stream at right angles to its general course; this wire is marked with suitable brass tags at each ten feet of its length and when stretched taut provides



Division A gauging Red Deer River.



Division A gauging Bow River.



Division A gauging Red Deer River.

a base for reference of cross-section measurements and determination of velocities. The stretching of the wire cable across a large and rapid stream is not the simple operation which it might at first sight appear to those who are unacquainted with the "wild" character of our mountain fed streams when in flood. Our practice was to first run a light but strong cod line across the stream with a portable canvas boat, and then haul the wire cable across with this line; when streams of considerable width, depth, and rapid current, are being dealt with this operation is an exciting but laborious one.

The wire cable being stretched it remains to run another rope or cable across the stream, about thirty feet above the cross-section cable, to serve as a guide for the boat used in determinations of depth and velocity. Upon this cable a small pulley runs, and to this the boat is fastened with suitable tackle to allow of its being moved up or down stream so that the stem will cross the stream exactly under the cross-section wire.

The observer now carefully measures by triangulation the width of the stream at water level, and then proceeds to determine the depth, with a specially constructed sounding rod, at each ten feet or five feet interval as the case may be, as shown by the marks on cross-section wire. This gives him an accurate cross-section of the stream at the water level, and he then determines the area of the high water and flood cross-sections by reference to the cross-section wire, or by measurements of differences of elevation with level and rod.

In connection with the latter measurement it may be of interest to note that the determination of high water, or flood water line, as being parallel to, and a certain elevation above the water level at date of observation, will in many cases give an erroneous area for the cross-sections at either of these stages of water. It will be found that not only at high and flood stages of water in a rapidly flowing stream, but even at mean flow, the elevation of the water at one shore will often be found much higher than at the other, this difference being caused by some peculiar set of the current, or unseen obstruction of the flow, which diverts the water so as to make it "climb" on one bank. It is therefore necessary in determining high water and flood water cross-sections, from marks left by these stages of water, to fix the elevations with reference to a line joining the high water and flood water marks on both banks of the stream, and not as referred to a horizontal line drawn from the marks on either bank.

The next step is to determine the velocity of the stream; this is done by measurement of the rate of flow with current meter, in each of the five or ten feet sections of the stream, and midway between the soundings. In deep streams, mid-depth readings of current meter were used; in shallow streams, mid-depth, or bottom and surface readings, or both, were used.

With the velocities thus obtained, the discharge for each subsection is calculated by simple formula:

$$Q = a \times v,$$

where "a" equals the area of each subsection, and "v" the velocity of subsection. The total discharge being then found from the sum of the discharges for each subsection measured.

Having determined the actual discharge of water at the date of cross-section, it remains to procure sufficient data to enable an approximate calculation to be made of the discharge of the stream at high water and flood water stages. The method of obtaining the cross-sections has already been explained, the further necessary data is procured by running careful levels up and down the stream from the point of cross-section, to give an accurate measurement of the slope or fall of the stream, and the banks and bottom are then examined to determine the factor of roughness or friction in the flow of water. This data enables us, by the aid of Kutter's formula for the flow of water in open channels, to give an approximate measurement of the discharge of the stream at high or flood level.

It must, however, be remembered that the above determinations give results that are only of use as a basis for approximate figures regarding the available water supply, for, in the absence of information as to the rise and fall of the stream, and the duration of flow at any height of water, it is impossible to give any fair estimate of the daily, monthly or annual discharge of streams, and this will only be possible after we

have established gauging stations, and have a series of observations extending over a considerable period of time to guide us.

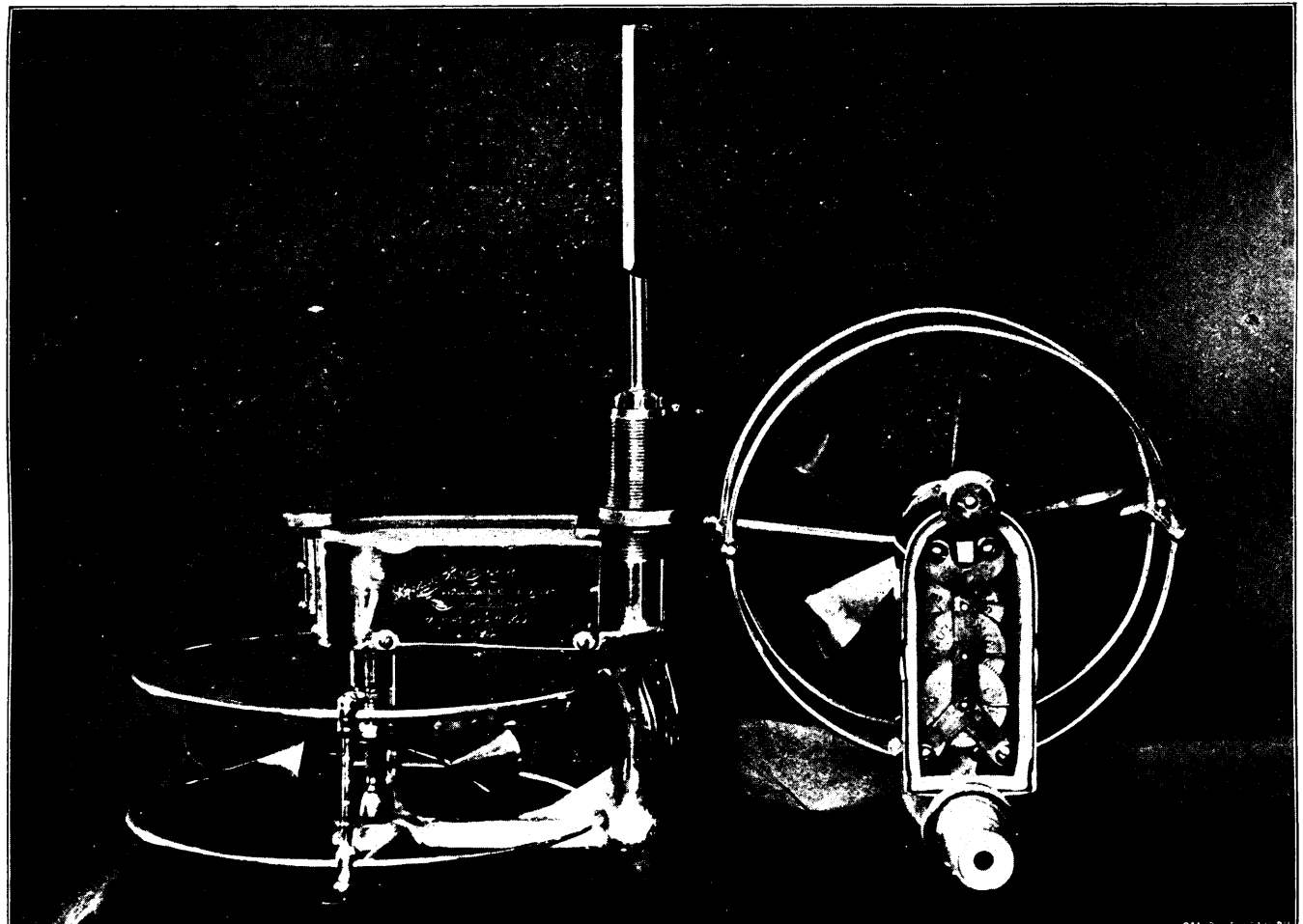
The boats used in our hydraulic investigations are portable canvas boats manufactured at Miamsburg, Ohio, U.S.A., and are called the "Acme Portable Boat"; they are nine feet in length when set up, and are exceedingly staunch and strong. Packed for transportation, they go into a space fifty inches long by twelve in diameter, and weigh when new about fifty pounds. Two men can work in one of these boats in the swiftest water, and in ordinary currents they will carry three men with perfect safety.

The current meters used during the past year were manufactured by J. S. J. Lallie, Denver, Colorado, U.S.A. (see Plate IX.), and were found to be very satisfactory and reliable instruments. They are hardly heavy enough for large streams or great depths, but are well suited for moderate velocities and depths, and in very shallow water and very slow velocities they leave little to be desired.

In using current meters of any kind it is necessary to establish the relation between the rate of revolution of the wheel of the meter and the rate of motion of the water, before the velocity of the water in feet per second can be found. This is called rating the meter, and to enable us to determine this ratio for our meters frequently and accurately, we have constructed a rating station at Calgary, which is described at some length below.

The measurements of cross-sections and velocities of streams were made as the line levels and topographical work progressed, generally by the surveyor in charge assisted by the chainman, or in the case of large streams by the whole strength of the division. After some practice the work went very smoothly, two or three small streams could be measured in a day, and it was only in exceptional cases that more than one day was devoted to the measurement of the largest streams met with.

The results of the measurements of the discharges of streams and springs during the past year, are given in the following schedules. The detailed observations in each case will be found with the general descriptions of the streams.



"Lallie" current meters.

SCHEDULE showing the discharge of certain streams in Southern Alberta, from measurements by Divisions A and B, Canadian Irrigation Surveys, during Season 1894.

Name of Stream.	Point of Measurement.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Date of observation.	Measured by Division	Remarks.
		Second ft.	Second ft.	Second ft.			
Beaverdam Creek	N. bdy. of Sec. 36, Tp. 28, Rge. 3, W. 5th Mer.	2·7	51·0	.....	Sept. 14	A	
Belly River	Sec. 31, Tp. 5, Rge. 25, W. 4th Mer	442·1	1445·0	2462·0	Aug. 18	B	
do	do do do	399·3	.....	.....	do 18	B	Check observation of actual discharge.
do	Sec. 1, Tp. 5, Rge. 27, W. 4th Mer	424·6	.....	.....	do 22	B	
do	Near intersection with E. bdy. Sec. 25, Tp. 8, Rge. 23, W. 4th Mer	2423·3	9839·0	17776·0	Oct. 8	B	
do	S. bdy. Tp. 3, Rge. 28, W. 4th Mer	423·8	.....	.....	Sept. 3	B	
do	Near intersection with N. bdy. Sec. 36, Tp. 8, Rge. 22, W. 4th Mer	3980·5	20971·0	30656·0	Oct. 10	B	Below confluence with Old Man River.
do	Near intersection with N. bdy. Sec. 33, Tp. 8, Rge. 24, W. 4th Mer	1129·2	6697·0	10862·0	do 13	B	
Big Hill Creek	½ mile south of E. bdy. of Sec. 13, Tp. 26, Rge. 4, W. 5th Mer	1·7	61·0	.....	Sept. 25	A	
Bow River	North-east corner of Sec. 34, Tp. 24, Rge. 2, W. 5th Mer	9271·8	.....	22632·0	June 25	A	River at high water stage.
do	S. W. ¼ Sec. 34, Tp. 25, Rge. 4, W. 5th Mer.	2784·5	12540·0	.....	Sept. 27	A	River at low water stage.
do	Below High River in Sec. 35, Tp. 21, Rge. 28, W. 4th Mer.	6654·7	26224·0	41945·0	Aug. 11	A	
Dog Pound Creek	N. bdy. of Sec. 33, Tp. 28, Rge. 4, W. 5th Mer.	2·4	66·0	.....	Sept. 19	A	
Elbow River	E. bdy. of Sec. 25, Tp. 23, Rge. 2, W. 5th Mer.	647·4	2113·0	.....	June 25	B	
do	E. bdy. of Sec. 13, Tp. 24, Rge. 4, W. 5th Mer.	412·2	1458·0	7368·0	do 30	A	River at about mean flow.
do	Sec. 34, Tp. 22, Rge. 5, W. 5th Mer	210·5	.....	.....	Oct. 3	A	Measured for actual discharge only.
Fish Creek	44 chains east of E. bdy. of Sec. 1, Tp. 23, Rge. 2, W. 5th Mer	16·1	657·0	1255·0	June 26	B	
do (N. Fork)	10 chains north of north-west corner of Sec. 19, Tp. 22, Rge. 3, W. 5th Mer.	2·7	.....	108·0	July 7	A	
do (S. Fork)	20 chains south of N. E. corner of Sec. 4, Tp. 22, Rge. 3, W. 5th Mer.	3·7	.....	.....	do 10	A	do do
Highwood River	90·66 chains down stream from E. bdy. Sec. 1, Tp. 18, Rge. 2, W. 5th Mer	893·7	8793·0	23538·0	do 9	B	
do do	N. bdy. of Sec. 32, Tp. 20, Rge. 28, W. 4th Mer.	667·9	14650·0	.....	do 19	A	River at about mean flow.
do do (N. Fork)	Sec. 1, Tp. 18, Rge. 2, W. 5th Mer	907·8	4692·0	11408·0	do 9	B	
do do (S. Fork)	Sec. 4, Tp. 17, Rge. 2, W. 5th Mer	3·9	395·0	1188·0	do 13	B	
do do do	Sec. 36, Tp. 17, Rge. 2, W. 5th Mer	23·5	5153·0	7131·0	do 11	B	

SCHEDULE showing the discharge of certain streams in Southern Alberta, from measurements by Divisions A and B, &c.—*Continued.*

Name of Stream.	Point of Measurement.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Date of observation.	Measured by Division.	Remarks.
		Second ft.	Second ft.	Second ft.			
Jumping Pound Creek ..	¼ Sec. corner on N. bdy. of Sec. 31, Tp. 24, Rge. 4, W. 5th Mer	85·5		1802·0	June 26	A	
do do ..	do do do ..	65·8		1785·0	do 27	A	
do do ..	Sec. 3, Tp. 24, Rge. 5, W. 5th Mer	24·6			Oct. 17	A	Measured for actual discharge only.
Lee Creek	Near intersection with E. bdy. of Tp. 2, Rge. 26, W. 4th Mer	11·3	1136·0	3136·0	Sept. 6	B	
Little Bow River ..	Sec. 31, Tp. 16, Rge. 26, W. 4th Mer.		326·0	993·0	July 28	B	
do	E. bdy. Sec. 12, Tp. 15, Rge. 26, W. 4th Mer.		191·0		Aug. 1	B	
do	S. bdy. of Sec. 1, Tp. 18, Rge. 28, W. 4th Mer.	3·1			Aug. 2	A	Measured for actual discharge only.
Little Red Deer River ..	At crossing of trail in N. W. ¼ Sec. 18, Tp. 34, Rge. 2, W. 5th Mer.	30·1	624·0		Oct. 13	A	River at low water stage.
Mahmee Creek	S. bdy. of Tp. 3, Rge. 27, W. 4th Mer.	1·0			Sept. 3	B	Gauged for water discharge only.
Milk River (N. Branch).	Intersection with south boundary of Tp. 1, Rge. 23, W. 4th Mer.	16·1	151·0	389·0	Sept. 17	B	
Mosquito Creek	N. bdy. of Sec. 35, Tp. 16, Rge. 29, W. 5th Mer.		98·0		July 20	B	
do	E. bdy. of Sec. 12, Tp. 15, Rge. 26, W. 4th Mer.		105·0		Aug. 1	B	
do	E. bdy. of Sec. 12, Tp. 16, Rge. 28, W. 4th Mer.		216·0	1741·0	July 23	B	
Nose Creek (W. Branch)	Sec. 1, Tp 26, Rge. 2, W. 5th Mer.	0·7	21·0		Sept. 1	A	
Oldman River	N. bdy. of Sec. 20, Tp. 9, Rge. 25, W. 4th Mer..	1078·0	6383·0	14547·0	Aug. 9	B	
Pincer Creek	Sec. 12, Tp. 7, Rge. 29, W. 4th Mer.	19·8	483·0	707·0	Oct. 22	B	
Pine Creek	Sec. 1, Tp. 22, Rge. 2, W. 5th Mer.		27·0		June 28	B	
Red Deer River	20 chains east of mouth of Raven River.	539·9	7203·0	14429·0	Oct. 16	A	River at low water stage.
Rolph Creek	Near intersection with south bdy. of Tp. 1, Rge. 24, W. 4th Mer.	2·3	23·0	52 0	Sept. 14	B	
Rosebud River	N. bdy. of Sec. 32, Tp. 28, Rge. 27, W. 4th Mer.		10·0	29·0	Sept. 7	A	
Sheep River..	Sec. 26, Tp. 20, Rge. 2, W. 5th Mer	257·0	15457·0		July 3	B	
do	Sec. 24, Tp. 20, Rge. 29, W. 4th Mer.	159·1	12463·0		July 23	A	River at mean flow.
do (North Fork)	North-east corner of Sec. 2, Tp. 21, Rge. 3, W. 5th Mer.	3·0	1118·0		July 12	A	Below irrigation ditches.
Spring creek in Sec. 11, Tp. 24, Rge. 4, W. 5th Mer.	About 27 chains south of Elbow River.	22·3			June 30	A	
Spring creek in Sec. 13, Tp. 24, Rge. 4, W. 5th Mer.	About 12 chains south of Elbow River.	1·5			June 30	A	
St. Mary River	Sec. 34, Tp. 4, Rge. 24, W. 4th Mer.	1208·8	2925·0	7770·0	Aug. 23	B	

do	Near intersection with S. bdy. of Tp. 1, Rge. 25, W. 4th Mer.	741·3	.....	.....	Sept. 10	B	
do	Near intersection with E. bdy, Sec. 25, Tp. 6, Rge. 23, W. 4th Mer	821·3	3003·0	6941·0	Oct. 4	B	
Waterton River	E. bdy. of Sec. 13, Tp. 6, Rge. 26, W. 4th Mer.	611·9	5465·0	7854·0	Aug. 16	B	
do	Intersection with S. bdy. of Tp. 3, Rge. 29, W. 4th Mer	501·9	4041·0	6820·0	Sept. 4	B	
Willow Creek	Sec. 24, Tp. 9, Rge. 26, W. 4th Mer	39·6	906·0	2504·0	Aug. 10	B	
do	Sec. 24, Tp. 13, Rge. 28, W. 4th Mer.	25·8	581·0	.....	July 25	B	

SCHEDULE of Springs and Spring Creeks, gauged by Division "A," 1894.

Date.	Description.	Part of Section.	Section.	Township.	Range.	West of	Discharge.
1894.							
Sept. 5	Spring in McPhersons coulée; water disappears a short distance from origin	S.W. ¼	4	28	1	5th Meridian.	20·4 gallons per minute.
do 5	Spring in McPhersons coulée, well defined on hillside but disappears a short distance from origin	S.E. ¼	5	28	1	do	4·3 do
do 5	Spring, well defined	N.W. ¼	19	27	1	do	2·8 do
June 21	Spring in small coulée, much tramped by cattle.	N.W. ¼	32	24	2	do	3·44 do
do 22	Spring in deep coulée, well defined and flowing through sandstone outcrop	N.E. ¼	36	24	3	do	1·8 do
July 2	Small spring creek	.....	12	24	4	do	15·3 do
	DIVISION "B," 1894.						
June 29	Spring creek crossed by east boundary of south-east ¼ Section 25; disappears within a mile. Origin about 15 chains westerly at base of rise in.	S.E. ¼	25	21	2	5th Meridian.	12 gallons per minute.
do 29	Spring flowing from hillside about 12 chains south of ¼ section corner on east boundary of Section 25 and about 40 feet west of same boundary; joins spring creek above origin in.	S.E. ¼	25	21	2	do	1·5 do
do 29	Spring do do do	S.E. ¼	25	21	2	do	0·95 do
July 5	Spring creek crossed by east boundary of Section 12, Township 20, Range 2; origin, springs in Section 11; disappears within a mile; gauged in.	N.E. ¼	7	20	1	do	64 do
do 5	Spring; disappears almost immediately in.	N.E. ¼	19	20	1	do	17 do
do 5	Spring; disappears within a few chains in.	S.W. ¼	20	20	1	do	4·6 do
do 6	Spring flowing from foot of rise; disappears within half a mile; origin near south-east corner.	S.W. ¼	8	20	2	do	6 do

SCHEDULE of Springs and Spring Creeks, gauged by Division B, 1894—*Continued.*

Date.	Description.	Part of Section.	Section.	Township.	Range.	West of	Discharge.
1894.							
July 7....	Spring in small coulée draining to valley of Tongue Flag Creek; disappears within 20 chains; origin about 5 chains west of east boundary in	S.E. ¼	13	19	2	5th Meridian.	3·5 gallons per minute.
do 12....	Spring in shallow coulée; draining to South Fork of Highwood River; origin in.....	S.W. ¼	13	17	2	do	2·2 do
do 13....	Spring at mouth of small coulée opening to Highwood Rivers flat; origin near north-east corner in	N.E. ¼	27	16	2	do	2·9 do
do 14....	Spring near head of same coulée, in north-west corner	N.W. ¼	26	16	2	do	1 do
do 17....	Spring creek crossed by northern boundary of Section 33, Township 16, Range 1, west of 5th Meridian; origin in coulée below sandstone cliff, near south-east corner of ¼ section; disappears within 1½ miles; gauged 1½ chains from origin in.....	N.W. ¼	33	16	1	do	20 do
do 18....	Spring flowing from sandstone rock in hill side; disappears immediately; situated near north-west corner in.....	N.W. ¼	36	16	30	4th Meridian.	0·55 do
do 18....	Spring on north slope of valley, near centre of ¼ section; disappears within ¼ mile; situate in.....	S.E. ¼	10	17	1	5th Meridian.	5·2 do
do 18....	Spring on north slope of valley, about 10 chains south-westerly from preceding one above; disappears within ¼ mile; situate near centre of.....	S.E. ¼	10	17	1	do	12 do
do 18...	Spring on east side of coulée; disappears within 4 chains; situate near north-east corner of.....	S.W. ¼	11	17	1	do	0·94 do
do 18....	Spring in coulée through which trail runs; situate in.....	.....	15	17	1	do	16·2 do
do 18....	Spring in coulée leading from Stimson's hay ranche.	....	... .	17	1	do	17·2 do
do 19....	Spring on south side of valley of Mosquito Creek; drains to creek; situate near northern boundary in.....	N.E. ¼	24	16	1	do	11·3 do
do 19....	Spring on south side of valley of Mosquito Creek, about 100 feet southerly from last mentioned spring; drains to creek; situate near north boundary in	N.E. ¼	24	16	1	do	5·2 do
do 19....	Mosquito Creek; gauged above the two last mentioned springs, in	S.E. ¼	25	16	1	do	8·6 do
do 19....	Spring in hollow, opposite the two last mentioned springs; situate in.....	S.E. ¼	25	16	1	do	2·3 do

do	24	Spring in Pine Coulée (south slope); disappears within 20 chains; origin near east boundary in	S.W. ¼	9	15	28	4th Meridian.	0·6	do
do	25	Spring in Pine Coulée (west slope), near north-west corner, in	N.W. ¼	22	14	28	do	0·75	do
do	25	Spring in Pine Coulée (southern slope); disappears within 15 chains; origin near north-east corner in	S.W. ¼	8	15	28	do	12	do
do	26	Spring in Pine Coulée (southerly slope); situate in north-west part	N.E. ¼	18	15	28	do	1·2	do
Aug.	1	Spring. Seepage from north bank of dry bed of Mosquito Creek; utilized by Byron for domestic purposes; situate at south-west corner of	S.W. ¼	12	15	26	do	0·53	do
do	12	Spring below North-West Mounted Police barracks at Macleod; utilized by police to irrigate garden; flows from south slope of valley of Old Man River in	N.E. ¼	11	9	26	do	7	do
do	20	Spring Creek; drains to Belly River; origin at mouth of Bull Horn Coulée, where same opens to Belly River valley; would be near east boundary in	N.E. ¼	24	5	26	do	80	do
do	31	Spring flowing from ridge (east slope) near west boundary in	N.W. ¼	2	3	26	do	0·44	do
do	31	do do	N.W. ¼	2	3	26	do	0·29	do
do	31	do do (These three used by H. Williams for domestic purposes.)	N.W. ¼	2	3	26	do	0·17	do
do	31	Spring flowing from south-westerly slope of ridge; disappears within a few chains; situate near north-east corner in	N.W. ¼	33	2	26	do	1·5	do
do	31	Spring flowing from northerly slope of valley of Lee Creek; disappears within a few chains; origin near east boundary in	S.W. ¼	29	2	26	do	1	do
do	31	Spring in small hollow; disappears within 40 chains; situate near east boundary in	S.W. ¼	36	2	27	do	2	do
Sept.	8	Spring creek, gauged close to intersection of east boundary, Township 2, Range 26, west of 4th Meridian, about 20 chains south of north-east corner Section 1; flow ceases within ½ mile from point of gauging in	N.E. ¼	1	2	26	do	6	do
Oct.	1	Spring in Middle Coulée; disappears within 40 chains; situate near north-east corner in	N.W. ¼	27	4	21	do	12	do
do	23	Spring at intersection of surveyed trail to Pincer Creek and Crow Lodge Creek (Scott's Coulée); drains to Old Man River; origin near north-west angle in	N.E. ¼	32	7	27	do	1·3	do

NOTE.—Many of the foregoing springs would yield a greatly increased flow if they were properly cleaned out and obstructions to flow removed. Cattle and horses have so tramped out these springs that in some cases the flow has almost entirely ceased.

ANALYSIS OF WATER.

Any discussion regarding the quantity of water available for irrigation is incomplete without some reference to the quality of the water for that purpose, it being well understood by irrigators that the water from different sources has widely different values owing to the fertilizing qualities contained therein.

In connection with the determination of the discharges of the different streams during the past season an attempt was made, by collecting samples for analysis, to estimate the value of the water for irrigation purposes; owing, however, to the want of proper appliances both for securing and transporting the samples, the work did not prove satisfactory. It is hoped, in view of the importance of the subject, that future experiments made with proper care and appliances will enable a schedule to be published containing an analysis of the waters in the arid region, which will serve as a guide in estimating the probable fertilizing qualities of these waters.

The silt or other fertilizing material carried by many streams is eventually nearly as valuable as the water itself, and the possibility of continued production of heavy crops from light soil without any fertilizing except that received from the water used in irrigating, has been clearly demonstrated on this continent, and elsewhere throughout the world where irrigation is practised. In some countries the clear water is refused for irrigation purposes while water carrying silt is readily saleable, and different authorities speak of the building up of worthless land entirely from the silt deposited upon it during irrigation, and thus ultimately converting worthless tracts into valuable areas.

The results obtained from the actual use of water for irrigation in the arid region, if carefully observed, will be of great assistance in determining the relative values of the water from the different sources of supply, and will doubtless be looked for with interest by those interested in the subject; the larger number of the streams in the arid region are very free from silt except during freshets, and the proof that these waters, although clear, contain matter in chemical solution which is valuable as a fertilizer will add greatly to the confidence of those who undertake the construction of extensive systems.

RATING STATION.

The current meters which we used this season were rated by the maker at Denver before being shipped, and were used with this rate until the completion of our rating station at Calgary.

To rate the meter it is necessary to cause it to move through still water at a uniform speed over a given distance, the time occupied, and the number of revolutions in passing over this distance being noted.

To enable these observations to be made frequently and accurately a rating station was constructed at Calgary (Plate No. X). It is situated in the pond caused by the dam across the Bow River erected by the Calgary Water Power Company. The station consists of a platform 130 feet long and feet 7 wide, built on piles firmly driven and capped with 8 x 10 caps, the floor of 2-inch plank being laid on three 4 x 6 in. stringers and firmly spiked. Upon this platform is laid a track of 3 feet gauge, with steel rails of 20 lbs. to the yard weight, firmly spiked and joined with fish plates. A small car, of sufficient size to carry the observer, is run backwards and forwards upon the track, the car having an arm extending over one side of the platform provided with collars and locking nuts to carry the metre, and on the other side a sharp metal point which passes close to two other metal points placed on the platform exactly one hundred feet apart, so that the time of passage of the car over this space may be accurately noted; the car is run backwards and forwards over this 100 feet base at varying speeds, the number of revolutions and the time being noted with stop watch for each observation.

With the data thus provided we are enabled to determine a rate for the meter for use in measuring the velocities in streams. The method of deducing the rate is shown by the following observation for rate of meter No. 25, taken at our rating station after the close of the season's operations.

Rating Station at Calgary, Alberta.

Department of the Interior.

RATE METER NO. 25.

Reduction of observations for rating taken at Calgary, Alberta, 29th October, 1894.

A. O. Wheeler, Observer. A. O. Wheeler, Computer.

REDUCTION BY RIGID METHOD.

No.	r		x	y	$x-x_o$	$y-y_o$	$(x-x_o)^2$	$(x-x_o)(y-y_o)$	Remarks.
		s.							
1	23·9	85·0	0·2812	1·1765	—0·618	—2·490	+0·382	+1·539	Length of base=100 ft.
2	24·2	69·2	0·3497	1·4451	—0·549	—2·221	+0·301	+1·219	
3	24·6	20·8	1·1827	4·8077	+0·284	+1·142	+0·081	+0·324	
4	24·4	39·0	0·6256	2·5641	—0·273	—1·102	+0·075	+0·301	
5	25·2	13·6	1·8529	7·3529	+0·954	+3·687	+0·910	+3·517	Meter vanes immersed 0·8 feet.
6	24·6	23·0	1·0696	4·3478	+0·171	+0·682	+0·029	+0·117	
7	23·8	97·6	0·2438	1·0246	—0·655	—2·641	+0·429	+1·730	
8	25·6	153·8	0·1664	0·6502	—0·733	—3·016	+0·537	+2·211	
9	24·1	77·0	0·3130	1·2987	—0·586	—2·367	+0·343	+1·387	
10	24·7	24·0	1·0292	4·1667	+0·130	+0·501	+0·017	+0·065	
11	24·2	42·0	0·5762	2·3810	—0·323	—1·285	+0·104	+0·415	
12	24·0	21·8	1·1009	4·5871	+0·202	+0·921	+0·041	+0·186	
13	24·5	26·0	0·9423	3·8462	+0·043	+0·180	+0·002	+0·008	
14	24·5	28·8	0·8507	3·4722	—0·048	—0·194	+0·002	+0·009	
15	24·9	10·6	2·3491	9·4340	+1·450	+5·768	+2·102	+8·364	
16	23·9	16·4	1·4573	6·0976	+0·558	+2·432	+0·311	+1·357	

$[x] = 14·3906$ $58·6524 = [y]$ $[(x-x_o)^2] = 5·666$ $22·749 = [(x-x_o)(y-y_o)]$ $x_o = 0·899$ $3·666 = y_o$

NORMAL EQUATIONS.

$$[(x-x_o)^2]a - [(x-x_o)(y-y_o)] = 0$$
$$5·666a - 22·749 = 0$$
$$a = \frac{22·749}{5·666} = 4·015$$
$$a = 4·015$$

$$b + x_o a - y_o = 0$$
$$b + 0·899a - 3·666 = 0$$
$$b + 3·609 - 3·666 = 0$$
$$b = 3·666 - 3·609 = ·057$$
$$b = ·057$$

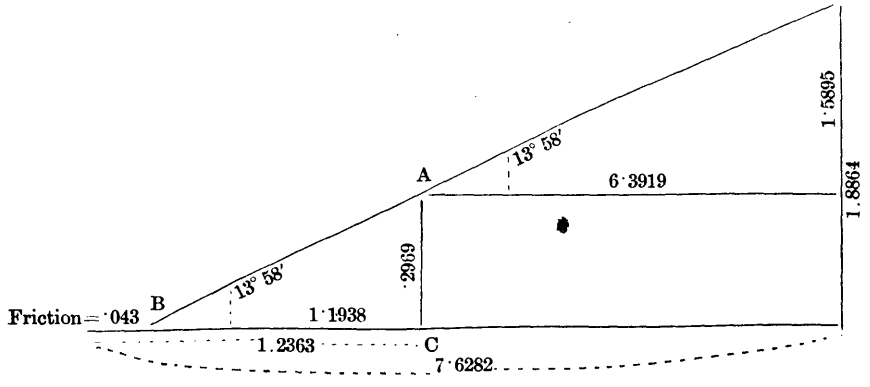
$$\text{Velocity}_i = 4·015 \times \frac{\text{Revolutions}}{\text{Time}} + ·057$$

13—4½***

CHECK computation by means of Groups selected from observations.

Length of Base = 100 ft.

No. of Ratings.	Time.	Revolutions.	Base. Time.	Revolutions. Time.	
	s				
1	85·0	23·9	1·1765	0·2812	First Group.
2	69·2	24·2	1·4451	0·3497	
7	97·6	23·8	1·0246	0·2438	
9	77·0	24·1	1·2987	0·3130	
			4)4·9449	1·1877	
			1·2362	·2969	
5	13·6	25·2	7·3529	1·8529	Second Group.
15	10·6	24·9	9·4340	2·3491	
16	16·4	23·9	6·0976	1·4573	
			3)22·8845	5·6593	
			7·6282	1·8864	



R : Cotan 13° 58′ = ·2969 : BC
Log. ·2969 = —1·4726102
Log. Cotan 13° 58′ = 10·6043065
10·0769167
Log. R. = 10·0000000
Log. BC = ·0769167 = 1·1938

·2969)1·1938(4·021

$a = 4·021$

6·3919 : 1·5895 = R : Tan A
Log. R + Log. 1·5895 = 10·2012605
Log. 6·3919 = ·8056300
Log. Tan. A = 9·3956305 = 13° 58′

1·5895)6·3919(4·021

$b = ·043$

$$\text{Velocity} = 4·021 \times \frac{\text{Revolutions}}{\text{Time}} + ·043$$

Department of the Interior.

COMPUTATION OF HIGH WATER AND FLOOD DISCHARGE OF CERTAIN STREAMS IN SOUTHERN ALBERTA, FROM MEASUREMENTS MADE FROM EXISTING EVIDENCES OF THESE STAGES OF WATER BY DIVISIONS A. AND B.

J. I. DUFRESNE, D.T.S.,

Computer.

The discharge of a stream is expressed by the product of the mean velocity and the area of the cross section.

$$\text{Discharge} = E \times v$$

E, or the area of the cross section, is found from the notes of the measurement of the cross section ; v, or the mean velocity, is to be computed from the observed slope of the stream, the wetted perimeter and the area of the cross section.

In the following computations Kutter's well known formula has been used. This formula, with constants numerically expressed in English measure (one foot and one second as units), is as follows :—

$$v = \left\{ \frac{41{\cdot}66 + \frac{1{\cdot}81132}{n} + \frac{{\cdot}0028075}{s}}{1 + \left(41{\cdot}66 + \frac{{\cdot}0028075}{s} \right) \times \frac{n}{\sqrt{r}}} \right\} \sqrt{rs}$$

in which s = the sine of the slope.

r = the mean hydraulic radius, or depth in feet,

$$= \frac{e}{p} \text{ or } \frac{\text{area of cross section}}{\text{wet perimeter}}$$

n = the co-efficient of roughness of the wet perimeter.

The quantities s and r are furnished by the notes of the observer's measurements on the ground. The factor n has to be estimated from an examination of the nature of the banks and bed of the stream, together with other conditions which may impede the flow of water. This factor varies from ·009 to ·040, and it is, therefore, apparent that a result dependent upon an estimation of this factor is largely influenced by the experience of the observer.

Computation.

The computations have been performed so as to give all the precision which the mode of survey would justify, irrespective of the evaluation of the co-efficient n, and the velocities have, therefore, been carried to the hundredth part of a foot.

In order to facilitate the work, and best adapt it to use of the arithmometer for computation, the following substitution was made in the formula :—

$$A = \frac{1{\cdot}81132}{n}, \quad B = 41{\cdot}66 + \frac{{\cdot}0028075}{s}, \quad C = nB$$

then the formula becomes

$$v = \left(\frac{A + B}{1 + \frac{C}{vr}} \right) \sqrt{rs}$$

This notation is used in the headings of the columns of the following tabulated computations ; the above preliminary remarks will serve to render this table comprehensive.

Name of River or Stream.	n	$\frac{1}{n}$	s	$\frac{1}{s}$	$\sqrt{s}$	Area of Cross-section.	p.	r	$\sqrt{r}$
Bow River	·025	40·00	·001356	737·463	·036824	2574·7	318·0	8·09654	2·845442
Red Deer River	·030	33·33	·004545	220·022	·067417	1359·9	244·7	5·55742	2·357418
						884·9	234·2	3·77839	1·943808
Elbow River	·030	33·33	·005964	167·673	·077227	913·0	296·8	3·07615	1·753896
						330·6	244·7	1·35104	1·162342
North fork of Sheep River	·030	33·33	·004394	227·583	·066287	187·0	74·6	2·50670	1·583256
Highwood River	·030	33·33	·002530	395·256	·050299	1633·2	243·9	6·69618	2·587697
Fish Creek	·030	33·33	·003680	271·739	·060663	200·1	66·0	3·03182	1·741212
						121·7	49·4	2·46356	1·569573
Pine Creek	·030	33·33	·001403	712·758	·037457	14·8	13·2	1·12121	1·058872
Elbow River	·030	33·33	·001610	621·118	·040125	592·4	141·2	4·19547	2·048284
						450·6	125·1	3·60192	1·897872
South fork Highwood River	·030	33·33	·004502	222·123	·067097	647·1	109 3	5·92040	2·433187
						481·1	84·7	5·68005	2·383286
Sheep River	·035	28·57	·003661	273·149	·060506	2472·8	392·0	6·30816	2·511605
						1939·4	366·0	5·29891	2·301936
North fork Highwood River	·035	28·57	·004061	246·244	·063726	1199·6	189·0	6·34709	2·519343
						621·5	136·5	4·55311	2·133802
Highwood River	·035	28·57	·004061	246·244	·063726	2063·4	250·0	8·27360	2·876387
						1114·4	230·0	4·84522	2·201186
South fork Highwood River	·030	33·33	·001555	643·087	·039433	283·6	90·0	3·15111	1·775137
						134·7	70·0	1·92429	1·387188
Mosquito Creek	·030	33·33	·001689	592·066	·041097	356·4	78·0	4·68462	2·164398
						47·2	41·0	1·15122	1·072949
Big Hill Creek	·030	33·33	·006394	156·397	·079962	16·3	15·6	1·04487	1·022189
North fork of Fish Creek	·030	33·33	·007764	128·800	·088114	22·1	17·0	1·30000	1·140175
Jumping Pound Creek	·030	33·33	·003664	272·926	·060531	275·5	85·5	3·22222	1·795055
do	·030	33·33	·003664	272·926	·060531	274·2	85·5	3·20702	1·790815
Little Red Deer River	·030	33·33	·003788	263·992	·061546	153·0	92·8	1·64871	1·284021
Rosebud River	·035	28·57	·000400	2500·000	·020000	26·9	16·6	1·62048	1·272981
						13·4	12·8	1·04687	1·023167
West branch of Nose Creek	·035	28·57	·001858	538·213	·043105	11·0	8·8	1·25000	1·118038
Beaverdam Creek	·035	28·57	·001989	502·765	·044598	20·5	12·5	1·64000	1·280625
Bow River	·025	40·00	·002083	480·077	·045639	1550·0	302·3	5·12736	2·264367
do	·025	40·00	·001894	527·983	·043520	3014·2	490·0	6·15143	2·480207
						4052·7	503·2	8·05386	2·837932
Dog Pound Creek	·035	28·57	·002155	464 037	·046422	24·9	14·8	1·68243	1·297085
Sheep River	·030	33·33	·005369	186·254	·073273	1198·4	250·9	4·77640	2·185498
Oldman River	·040	25·00	·001995	501·253	·044665	3869·0	1139·0	3·39683	1·843049
	·035	28·57				2121·0	679·0	3 12371	1·767402
						1381·6	368·0	3·75435	1·937614
Willow Creek	·035	28·57	·001617	983·284	·031891	832·0	251·0	3·31474	1·820642
	·030	33 33				278·0	93·2	2·98283	1·727087
Belly River	·040	25·00	·002462	406·173	·049619	1391·2	1239·5	1·12239	1·059429
	·035	28·57				601·9	440·5	1·36640	1·168931
Waterton River	·040	25·00	·002727	366·703	·052221	1718·5	479·8	3·58170	1·892537
	·035	28·57				1001·0	262·3	3·81624	1·953519
Belly River No. 2	·040	25·00	·002592	385·802	·050912	1291·1	849·0	1·52073	1·233179
	·035	28·57				829·7	694·1	1·19536	1·093325

$\sqrt{rs}$	A. $\frac{1}{n} \times 1{\cdot}81132$	B. $\frac{1}{s} \times {\cdot}0028075 + 41{\cdot}66$	Numerator. A + B	C. n B.	Denominator. $1 + \frac{C}{\sqrt{r}}$	D. Numerator ÷ Denominator.	Velocity. $D\sqrt{sr}$	E. Area of Cross-section.	Discharge. E × Velocity. Second Feet.
0·10478	72·452800	43·730427	116·18323	1·093261	1·384215	83·9344	8·79	2574·7	22632
0·15893	60·371296	42·277712	102·64901	1·268331	1·538017	66·7411	10·61	1359·9	14429
0·13105					1·652498	62·1175	8·14	884·9	7203
0·13545	60·371296	42·130742	102·50204	1·263922	1·720637	59·5721	8·07	913·0	7368
0·08976					2·087393	49·1053	4·41	330·6	1458
0·10495	60·371296	42·298939	102·67023	1·268968	1·801493	56·9917	5·98	187·0	1118
0·13016	60·371296	42·769681	103·14098	1·283090	1·495842	68·9518	8·97	1633·2	14650
0·10563	60·371296	42·422907	102·79420	1·272687	1·730920	59·3870	6·27	200·1	1255
0·09522					1·810849	56·7657	5·40	121·7	657
0·03966	60·371296	43·661068	104·03236	1·309832	2·237007	46·5052	1·84	14·8	27
0·08219	60·371296	43·403789	103·77508	1·302114	1·635710	63·4434	5·21	592·4	3086
0·07615					1·686092	61·5477	4·69	450·6	2113
0·16326	60·371296	42·283610	102·65491	1·268508	1·521336	67·4769	11·02	647·1	7131
0·15991					1·532252	66·9961	10·71	481·1	5153
0·15197	51·749412	42·426866	94·17628	1·484940	1·591232	59·1845	8·99	2472·8	22230
0·13928					1·645083	57·2471	7·97	1939·4	15457
0·16055	51·749412	42·351330	94·10074	1·482297	1·588366	59·2437	9·51	1199·6	11408
0·13598					1·694674	55·5273	7·55	621·5	4692
0·18330	51·749412	42·351330	94·10074	1·482297	1·515333	62·0991	11·38	2068·4	23538
0·14027					1·673408	56·2330	7·89	1114·4	8793
0·07000	60·371296	43·465467	103·83676	1·303964	1·734571	59·8631	4·19	283·6	1188
0·05470					1·940005	53·5240	2·93	134·7	395
0·08895	60·371296	43·322225	103·69352	1·299667	1·600475	64·7892	5·76	365·4	2105
0·04409					2·211303	46·8925	2·07	47·2	98
·08174	60·371296	42·099085	102·47038	1·262973	2·235557	45·8366	3·75	16·3	61
·10047	60·371296	42·021606	102·39290	1·260648	2·105662	48·6274	4·89	22·1	108
·10866	60·371296	42·426240	102·79754	1·272787	1·709052	60·1489	6·54	275·5	1802
·10840	60·371296	42·426240	102·79754	1·272787	1·710731	60·0898	6·51	274·2	1785
·07903	60·371296	42·401158	102·77245	1·272035	1·990665	51·6272	4·08	153·0	624
·02546	51·749412	48·678750	100·42816	1·703756	2·338399	42·9474	1·09	26·9	29
·02046					2·665179	37·6816	0·77	13·4	10
·04819	51·749412	43·171033	94·92044	1·510986	2·351462	40·3666	1·95	11·0	21
·05711	51·749412	43·071513	94·82092	1·507503	2·177162	43·5525	2·49	20·5	51
·10334	72·452800	43·007816	115·46062	1·075195	1·474832	78·2873	8·09	1550·0	12540
·10794	72·452800	43·142312	115·59511	1·078558	1·434866	80·5616	8·70	3014·2	26224
·12351					1·380051	83·7615	10·35	4052·7	41945
·06021	51·749412	42·962784	94·71220	1·503697	2·159289	43·8627	2·64	24·9	66
·16014	60·371296	42·182908	102·55420	1·265487	1·579038	64·9473	10·40	1198·4	12463
·08232	45·283000	43·067268	88·35027	1·722691	1·934696	45·6662	3·76	3869·0	14547
·07894					1·974702	44·7411	3·53	2121·0	7487
·08654	51·749412		94·81668	1·507354	1·777943	53·3294	4·62	1381·6	6383
·05806	51·749412	44·420570	96·16998	1·554720	1·853941	51·8733	3·01	832·0	2504
·05508	60·371296		104·79187	1·332617	1·771598	59·1510	3·26	278·0	906
·05257	45·283000	42·800331	88·08333	1·712013	2·615977	33·6713	1·77	1391·2	2462
·05800	51·749412		94·54974	1·498012	2·281523	41·4415	2·40	601·9	1445
·09883	45·283000	42·689519	87·97252	1·707581	1·902271	46·2461	4·57	1718·5	7854
·10201	51·749412		94·43893	1·494133	1·764841	53·5113	5·46	1001·0	5465
·06278	45·283000	42·743139	88·02614	1·709726	2·386437	36·8860	2·32	1291·1	2995
·05566	51·749412		94·49255	1·496010	2·368312	39·8987	2·22	829·7	1842

Name of River or Stream.	n	$\frac{1}{n}$	s	$\frac{1}{s}$	$\sqrt{s}$	Area of Cross-section.	p.	r	$\sqrt{r}$
Willow Creek	·035	28·57	·002603	384·172	·051020	197·1	114·8	1·71690	1·310305
						82·7	71·7	1·15342	1·073974
Little Bow River	·030	33·33	·001155	865·801	·033985	403·7	217·3	1·85780	1·363011
						154·5	102·0	1·51471	1·230735
Little Bow River	·030	33·33	·000265	3773·585	·016279	167·7	92·4	1·81494	1·347197
						63·2	57·8	1·09343	1·045672
Mosquito Creek	·035	28·57	·002348	425·894	·048456	155·1	135·5	1·14465	1·069883
						46·1	35·0	1·31714	1·147667
Mosquito Creek	·0275	36·36	·000871	1148·105	·029513	401·2	90·5	4·43314	2·105502
						97·9	57·0	1·71754	1·310550
St. Mary River	·035	28·57	·002083	480·077	·045640	1221·7	213·0	5·73568	2·394927
						640·1	178·2	3 59203	1·895265
Watertown River No. 2	·029	34·48	·001127	887·311	·033571	1140·5	179·4	6 35730	2·521369
						814·7	169·0	4·82071	2·195612
Lee Creek	·035	28·57	·004508	221·828	·067142	501·0	153·8	3·25748	1·804849
	·030	33·33				170·6	59·7	2·85762	1·690450
Belly River No. 5	·030	33·33	·000814	1228·501	·028531	4436·5	419·3	10·57978	3·252657
						3307·8	356·9	9·26814	3·044362
Belly River No. 6	·030	33·33	·000947	1055·966	·030773	2026·4	315·3	6·42690	2·535133
						1501·5	306·4	4·90046	2·213698
Belly River No. 4	·035	28·57	·000682	1466·129	·026115	3703·4	434·2	8.52925	2·920488
						2484·6	385·8	6·44012	2·537739
St. Mary River No. 3	·035	28·57	·002248	444·840	·047413	1136·0	221·3	5·13330	2·265679
						671·8	203·0	3·30936	1·819165
North Branch of Milk River	·030	33·33	·001667	599·880	·040829	95·0	32·8	2·89634	1·701864
						52·0	28·5	1·82456	1·350763
Rolph Creek	·030	33·33	·002215	451·467	·047064	21·7	18·7	1·16043	1·077233
						10·0	9·2	1·08696	1·042574
Pincer Creek	·035	28·57	·001799	555·864	·042415	304·6	190·8	1·59644	1·263503
						139·5	51·3	2·71930	1·649039

$\sqrt{rs}$	A. $\frac{1}{n} \times 1{\cdot}81132$	B. $\frac{1}{s} \times {\cdot}0028075 + 41{\cdot}66$	Numerator. A + B	C. nB.	Denominator. $1 + \frac{C}{\sqrt{r}}$	D. Numerator ÷ Denominator.	Velocity. $D\sqrt{sr}$	E. Area of Cross-section.	Discharge. E × Velocity. Second Feet.
·06685	51·749412	42·738563	94·48797	1·495850	2·141604	44·1202	2·95	197·1	581
·05479					2·392818	39 4882	2·16	82·7	179
·04632	60·371296	44·090736	104·46203	1·322722	1·970441	53·0145	2·46	403·7	993
·04183					2·074741	50·3494	2·11	154·5	326
·02193	60·371296	52·254340	112·62564	1·567630	2·163623	52·0542	1·14	167·7	191
·01702					2·499161	45·0653	0·77	63·2	49
·05184	51·749412	42·855697	94·60511	1·499949	2·401975	39·3864	2·04	155·1	316
·05561					2·306956	41·0086	2·28	46·1	105
·06214	65·859595	44·883305	110·74290	1·234291	1·586222	69·8155	4·34	401·2	1741
·03868					1·941811	57·0307	2·21	97·9	216
·10930	51·749412	43·007816	94·75723	1·505274	1·628526	58·1859	6·36	1221·7	7770
·08650					1·794229	52·8122	4·57	640·1	2925
·08464	62·454314	44·151126	106·60544	1·280383	1·507813	70·7020	5·98	1140·5	6820
·07371					1·583155	67·3373	4·96	814·7	4041
·12118	51·749412	42·282782	94·03219	1·479897	1·819956	51·6673	6·26	501·0	3136
·11350	60·371296		102·65408	1·268483	1·750382	58·6467	6·66	170·6	1136
·09280	60·371296	45·109017	105·48031	1·353271	1·416051	74·4891	6·91	4436·5	30656
·08686					1·444517	73·0212	6·34	3307·8	20971
·07801	60·371296	44·624625	104·99592	1·338739	1·528074	68·7113	5·36	2026·4	10862
·06812					1·604752	65·4281	4·46	1501·5	6697
·07627	51·749412	45·776157	97·52557	1·602165	1·548595	62·9768	4·80	3703·4	17776
·06627					1·631336	59·7826	3·96	2484·6	9839
·10742	51·749412	42·908888	94·65830	1·501811	1·662853	56·9252	6·11	1136·0	6941
·08625					1·825550	51·8519	4·47	671·8	3003
·06949	60·371296	43·344163	103·71546	1·300325	1·764059	58·7936	4·09	95·0	389
·05515					1·962660	52·8443	2·91	52·0	151
·05070	60·371296	42·927494	103·29879	1·287825	2·195493	47·0504	2·39	21·7	52
·04907					2·235237	46·2138	2·27	10·0	23
·05359	51·749412	43·220588	94·97000	1·512721	2·197243	43·2223	2·32	304·6	707
·06994					1·917340	49·5322	3·46	139·5	483

AREA COVERED BY SEASON'S SURVEYS AND COST OF THE SAME.

Before entering upon any detailed remarks regarding the surveys of the past year, the following general information regarding work accomplished will be of interest.

The accompanying statement exhibits in tabular form the mileage of line levels run and areas covered by the topographical survey, and shows the cost of the completed work.

SCHEDULE showing number of miles of line levels run, and area of topographical surveys completed, by Divisions A and B during the season of 1894, with cost of completed work.

Division.	Miles of line levels run.	Area of topographical surveys in square miles.	Total cost of completed work.	Cost per square mile.
			$	$
A	293·95	937·0	4,936·24	5·26
B	412·60	1,100·0	5,411·08	4·91

The following schedule shows the extent and location of reservoir sites surveyed :—

SCHEDULE OF RESERVOIR SITES.

Description.	Lands Affected.					Elevation.	Remarks.
	Part Sec.	Section.	Township.	Range.	West of		
Reservoir in the valley of North Fork of Fish Creek	S. ½	30	22	3	5	3934	Reservoir to be created by dam across valley.
	N. ½	19	22	3	5		
	S.E. ¼	25	22	4	5		
	N.E. ¼	24	22	4	5		
Red Deer Lake (at present dry), natural reservoir, no dam needed.	S. ½	24	22	2	5	....	Has been applied for as reservoir site by the Calgary Irrigation Company.
	S.E. ¼	23	22	2	5		
	N. ½	14	22	2	5		
	S.E. ¼	14	22	2	5		
	Sec.	13	22	2	5		
Small lakes and depressions surrounding them	S.E. ¼	14	21	2	5		
	S.W. ¼	13	21	2	5		
	N. ½	11	21	2	5		
Dry bed of lake with extension of basin to eastward	S. ½	7	18	1	5	....	No dam needed.
	N. ½	6	18	1	5		
	S.E. ¼	12	18	2	5		
	N.E. ¼	1	18	2	5		
Two small lakes and depression containing them	N.E. ¼	26	16	2	5	....	No dam needed.
	N.W. ¼	25	16	2	5		
Dry bed of extensive lake and valley containing it	S. ½	9	17	28	4	....	Flood discharge water from Mosquito Creek can be held in this reservoir.
	N.W. ¼	4	17	28	4		
	Sec.	5	17	28	4		
	N. ½	32	17	28	4		
	S.E. ¼	32	17	28	4		
	S.W. ¼	33	17	28	4		
	N.W. ¼	28	17	28	4		
Basin at head of coulée	N.W. ¼	27	16	26	4	....	Reservoir created by the erection of dam across coulee.
	Sec.	34	16	26	4		

SCHEDULE OF RESERVOIR SITES—*Continued.*

Description.	Lands Affected.					Elevation.	Remarks.
	Part Sec.	Section.	Township.	Range.	West of		
Dry bed of lake and valley containing it, and large slough with low land surrounding it	Sec.	31	13	25	4	...	A very favourable site for storage of large quantity of water.
	W. ½	6	14	25	4		
	N. ½	36	13	26	4		
	Sec.	1	13	26	4		
	Sec.	12	13	26	4		
Spring lake and valley containing same	S.E. ¼	5	2	25	4		
	S.W. ¼	4	2	25	4		
Westmary Lake and Eastmary Lake with valley containing them	Sec.	7	1	24	4		
	Sec.	12	1	25	4		
Large spring lake and valley containing same	W. ½	29	2	22	4		
	N. ½	19	2	22	4		
	E. ½	30	2	22	4		
	S.W. ¼	30	2	22	4		
Dry bed of lake in coulee	S. ½	7	5	19	4		
	N.E. ¼	6	5	19	4		
	S. ½	8	5	19	4		
	N. ½	5	5	19	4		
	S.W. ¼	9	5	19	4		
	W. ½	4	5	19	4		
Weed Lake and basin	N.W. ¼	24	23	27	4	3220	A very large quantity of water can be stored in this basin by construction of small earth dams.
	W. ½	25	23	27	4		
	E. ½	26	23	27	4		
	E. ½	33	23	27	4		
	N.W. ¼	36	23	27	4		
	W. ½	1	24	27	4		
	Sec.	2	24	27	4		
Bed of lake at present dry, and basin containing same	N.W. ¼	19	18	27	4	3220	This large lake bed will hold a large quantity of water. It is probably rather low for irrigation of surrounding country, but would serve as a good reservoir for supplying Little Bow River.
	W. ½	30	18	27	4		
	Sec.	31	18	27	4		
	N.W. ¼	32	18	27	4		
	N.E. ¼	24	18	28	4		
	Sec.	25	18	28	4		
	W. ½	36	18	28	4		
	S.W. ¼	4	19	27	4		
	S. ½	5	19	27	4		
	N.W. ¼	5	19	27	4		
	Sec.	6	19	27	4		
Bed of lake, at present dry, and basin containing same	N. ½	7	22	28	4	3275	
	S. ½	18	22	28	4		
Bed of lake, at present dry, and basin containing same	N. ½	30	22	28	4	3302	
Bed of lake, at present dry, and basin containing same	Sec.	36	22	29	4	3295	

SCHEDULE showing the slope or fall in certain streams in the District of Alberta.

Name of Stream.	Portion of Stream Measured.	Slope or Fall per Mile of Length.	Remarks.
		Feet.	
Red Deer River.....	From the crossing of the north boundary of Tp. 32, R. 5, west of 5th Mn., to the ford of the Rocky Mountain House trail, near the mouth of the Raven River—about 23 miles.....	20	Deduced from elevations taken by a barometer.
Little Red Deer River ..	From the crossing of the north boundary of Sec. 33, Tp. 32, R. 4, to the ford of the Rocky Mountain House trail, in the north-west ¼ of Sec. 19, Tp. 34, R. 3, all west of the 5th Mn. —about 16 miles.....	21·5	Deduced from elevations taken by a barometer.
Dog Pound Creek.....	From the crossing of the north boundary of Sec. 33, Tp. 28, R. 4, to the outlet into the Little Red Deer River in Sec. 9, Tp. 33, R. 3, all west of the 5th Mn.—about 38 miles.....	15	The elevation at the mouth of this stream was taken by a barometer.
Rosebud River.....	From the source, near the junction of the Dog Pound Creek and the Little Red Deer River to the crossing of the north boundary of Sec. 32, Tp. 28, R. 27, west of the 4th Mn.—about 36 miles.....	8	The elevation at the source was taken by a barometer.
Beaverdam Creek.....	From the western crossing of the north boundary of Sec. 36, Tp. 28, R. 3, west of 5th Mn. to a point one mile down stream—1 mile.....	10·50	
West branch of Nose Creek.....	From the crossing of the east boundary of Sec. 1, Tp. 26, R. 2, to the crossing of the north boundary of Sec. 34, Tp. 24, R. 1, all west of 5th Mn.—about 10 miles.....	18·50	
East Branch of Nose Creek.....	From the crossing of the north boundary of Sec. 33, Tp. 28, R. 1, to the crossing of the north boundary of Sec. 34, Tp. 24, R. 1, all west of the 5th Mn.—about 29 miles.....	7·50	
Bighill Creek.....	From the crossing of the east boundary of Sec. 13, Tp. 25, R. 4, west of 5th Mn., to a point half a mile down stream.....	33·75	
Bow River.....	From the crossing of the east boundary of Tp. 25, R. 4, west of 5th Mn., to the crossing of the east boundary of Tp. 21, R. 28, west of 4th Mn.—about 53 miles.....	9·75	
Elbow River.....	From the crossing of the east boundary of Sec. 13, Tp. 24, R. 4, to the crossing of the east boundary of Tp. 23, R. 2 (Sarcee Indian Reserve), all west of the 5th Mn.—about 15 miles.....	23·00	
North Fork of Fish Creek	From the crossing of the east boundary of Sec. 25, Tp. 22, R. 4, to the crossing of the east boundary of Sec. 21, Tp. 22, R. 3, all west of 5th Mn.—about 3·5 miles.....	41·00	
South Fork of Fish Creek	From the crossing on the east boundary of Sec. 4, Tp. 22, R. 3, to the crossing of the north boundary of Sec. 35, Tp. 22, R. 1, all west of the 5th Mn.—about 15 miles.....	36·50	
N. Fork of Sheep River..	From the crossing near the N. E. corner of Sec. 2, Tp. 21, R. 3, to the crossing of the north boundary of Sec. 33, Tp. 20, R. 2, all west of the 5th Mn. —about 5 miles.....	34·20	
Sheep River	From the crossing of the east boundary of Sec. 25, Tp. 20, R. 2, west of the 5th Mn., to the crossing of the east boundary of Sec. 24, Tp. 20, R. 29, west of 4th Mn.—about 14·5 miles.	21·4	

SCHEDULE showing the slope or fall in certain streams in the District of Alberta—*Con.*

Name of Stream.	Portion of Stream Measured.	Slope or fall per Mile of Length.	Remarks.
		Feet.	
Highwood River	From the crossing of the east boundary of Sec. 36, Tp. 17, R. 2, west of the 5th Mn., to the crossing of the north boundary of Sec. 32, Tp. 20, R. 28, west of the 4th Mn.—30¼ miles	17·6	
Little Bow River	From the crossing of the north boundary of Sec. 36, Tp. 18, R. 29, to the crossing of the east boundary of Sec. 12, Tp. 15, R. 26, all west of the 4th Mn.—about 39 miles	7·0	
Mosquito Creek	From the middle crossing on the north boundary of Sec. 31, Tp. 16, R. 29, to the south crossing of the east boundary of Sec. 12, Tp. 15, R. 26, all west of the 4th Mn.—about 35 miles	11·50	
Willow Creek	From a point opposite the Mounted Police station, about 3½ miles northerly up the valley from the north boundary of Tp. 12, R. 28, to the southerly crossing of the east boundary of Sec. 24, Tp. 9, R. 26, all west of the 4th Mn. —about 51 miles	5·60	
Oldman River	From a point about 27 chains north-westerly from the north-east corner of Sec. 12, Tp. 7, R. 29, to the junction of the three channels in the north-east quarter of Sec. 20, Tp. 9, R. 25, all west of the 4th Mn.—about 35½ miles	9·80	
Pincer Creek	One mile of it near the east boundary of Sec. 12, Tp. 7, R. 29, west of 4th Mn	9·50	
Waterton River	From the crossing of the south boundary of Tp. 3, R. 29, to the crossing of the east boundary of Sec. 13, Tp. 6, R. 26, all west of the 4th Mn.—about 45 miles	19·30	
Belly River	From the crossing of the north boundary of Tp. 2, R. 28, to the crossing of the north boundary of Sec. 36, Tp. 8, R. 22, all west of the 4th Mn.—about 116 miles	11·50	
St. Mary River	From the crossing of the north boundary of Sec. 31, Tp. 2, R. 24, to the crossing of the east boundary of Sec. 24, Tp. 6, R. 23, all west of the 4th Mn.—about 54 miles	11·00	
Lee Creek	Half a mile on each side of the intersection of the east boundary of Sec. 36, Tp. 2, R. 26, west of 4th Mn.—one mile	23·80	
Milk River	From the crossing of the International Boundary to the northerly crossing of the east boundary of Sec. 25, all in Tp. 1, R. 23 west of the 4th Mn.—about 7 miles	13·30	
Rolph Creek	Half a mile on each side of the crossing of the south boundary of Tp. 1, R. 24, west of 4th Mn.—one mile	11·70	

DETAILED REPORT BY DIVISIONS.

Having discussed the general system under which the Canadian irrigation surveys are being performed, and the results obtainable thereby, we pass to a more detailed treatment of the work during the season of 1894.

In considering the question of the season's field work it was decided to confine our operations to that portion of the District of Southern Alberta lying between the International Boundary and Township 32, and extending easterly from the foothills as far as the work could be carried before the close of the season. This district embraced the portion of the arid region within which the greatest amount of irrigation is being undertaken,

and also included the rivers or streams which will serve as the main source of water supply, and which it was desirable should be examined and gauged as near their source as possible.

The field staff was divided into two divisions, A and B. Division A being under the immediate charge of the writer, and division B under charge of Mr. A. O. Wheeler, D.L.S.

The district within which work was to be carried on was also divided so as to give each division definite limits within which to operate, and to prevent clash or overlap in the work, and also to enable closings to be made upon the same bench marks by the different levellers.

In pursuance of this arrangement division A worked during the season in the portion of the district lying north of Township 16, and division B between Township 16 and the International Boundary.

The elevation (3,387 feet above sea level) which had been decided upon as the basis for our levels was that established by the transcontinental levels run from east and west by the Canadian Pacific Railway Company to the bridge across the Elbow River at Calgary. Before proceeding to the regular work under the system it was necessary to carry the elevation from the point above mentioned to a permanent bench mark in our system, which would serve as a point of departure for both divisions; this was accomplished by carrying careful levels from the point in question to the N.E. corner of Township 24, Range 2, west of the 5th Meridian, where permanent bench mark No. 4 was established.

From this bench mark both divisions started work. The operations of division B will be found clearly set forth in the report of Mr. A. O. Wheeler, D.L.S., appended hereunto, those of division A it is now proposed to consider.

Starting from the bench mark above mentioned, the work of division A was first carried west along the 7th base line as far as Jumping Pound Creek, in Range 4, west of 5th Meridian, this stream and also the Bow River which was crossed a short distance from the starting point, being cross-sectioned at nearest convenient points and their discharges determined. The Jumping Pound Creek flows along the eastern limit of the foothills, and the country to the west is very rough and broken and unsuited for rapid levelling, it was therefore determined to make the bench mark established in the valley of this creek the limit of operations on this line. Returning to the north-east corner of Township 24, Range 4, west of the 5th Meridian, work was continued south along the east boundary of this range to the north-east corner of section 24, Township 22, Range 4, west 5th Meridian. This line crosses the Sarcee Indian Reserve and intersects the Elbow River and the north fork of Fish Creek, the discharge of both of which streams was determined near the intersection of the line; crossing the Indian reserve the highest point during the season's operations was reached, on a spur of the foothills, at an elevation of 4,598 feet.

South of the Indian reserve the country is very hilly and broken, and rapid levelling was found impossible, the work was therefore deflected to the east from the corner of section 24 above mentioned, for a distance of three miles following the valley of the north fork of Fish Creek, then turning south a zigzag course was followed along section boundaries, so as to keep the work in the valley of the south fork of Fish Creek and the low country between it and the north fork of Sheep Creek. Both these latter streams were crossed on this portion of the work and the necessary measurements were made, near the intersections with the line, to determine their discharges.

From the north-east corner of section 35, Township 20, Range 3, west of 5th Meridian, to which work had been extended by the zigzag course from the north, the 6th base line was followed east a distance of 24 miles to the east boundary of Range 28, west of 4th Meridian. In running this line a closing was made at the north-east corner of Township 20, Range 2, west of 5th Meridian, with the work of Division B, which had been brought south from the original starting point along the east boundary of this range. Highwood River was crossed by this section of the work and was measured in the usual manner to determine discharge at different stages of water.

Returning to the north-east corner of Township 20, Range 29, west of 4th Meridian, work was continued south along the eastern boundary of this Range to Township 16, the

southern limit of the district allotted to Division A within which to operate. In running this line Sheep Creek and Highwood River were intersected and were gauged to determine discharge

The division now moved to the north-east corner of Township 16, in Range 28, and ran north along the east boundary of the range as far as the north boundary of Township 20, the Little Bow River, which was intersected by this line, being gauged near the intersection.

From the north boundary of Township 20 work was carried north simultaneously along the east boundaries of Ranges 28 and 29, through Townships 21, 22, 23 and 24, the Bow River being gauged below the mouth of Highwood River while this work was in progress, and upon its completion operations were extended along the following lines:—

The north boundary of Township 21, Range 28, west of 4th Meridian.

The north boundary of Township 24, Range 28, west of 4th Meridian.

The north boundary of Township 27, Ranges 26 and 27, west of 4th Meridian.

The north boundary of Township 22, Range 29, west of 4th Meridian.

The completion of work upon these lines brought the finished operations up to the north-east corner of Township 24, Range 29, west of 4th Meridian, from which point the 7th base line was followed west across this range and Range 1, west of 5th Meridian, to the original starting point of the season's operations, the closing on bench mark No. 4 showing a difference of 0·52 feet in a net distance of 96 miles of levels run.

From the original starting point operations were extended north along the east boundary of Range 2, west of 5th Meridian, a distance of 24 miles to the 8th base line, which was followed east 16½ miles to the east bank of the Rosebud River, and west to the quarter section corner on the north boundary of section 31, in Township 28, Range 4, west of 5th Meridian, a distance of 17½ miles. The latter line intersected the Beaverdam and Dog Pound Creeks, both of which were gauged.

Commencing again at the north-east corner of the last mentioned township work was carried south along the east boundary of Range 4, west of 5th Meridian a distance of 24 miles to the north-east corner of Township 24, closing on bench mark No. 10, previously established at this point, with a difference of 0·67 feet in a total distance of 73 miles of levels run. On this line the Bow River and Big Hills Creek were intersected, both streams being gauged near their intersection with the line.

This completed the line work of Division A for the season, 295 miles of line having been run, along which careful levels were taken and the adjacent topography located. The remainder of the season, up to the early part of November when the parties left the field, was devoted to special examinations of topography and hydrography in certain parts of the district, some of which are deserving of special mention.

DIVERSION OF WATER FROM THE ELBOW RIVER INTO THE HEAD OF THE NORTH FORK OF FISH CREEK.

Both the north and south forks of Fish Creek, and the main stream below the junction of these forks, are used as sources of supply for irrigation ditches now in operation, but the flow of water in this stream is so uncertain, having during the past two seasons ceased entirely in parts of the channel during the summer months, that it was of great importance, not only to the owners of irrigation systems heading therein but also to the large number of settlers resident in the valley of the stream, that an investigation should be made to determine the possibility of diverting water from the Elbow River into Fish Creek during high water or flood discharge in the former stream, and the conservation of this water by the construction of reservoirs until needed to augment the flow in Fish Creek during the irrigating season.

It was known that the north fork of Fish Creek headed somewhere near the Elbow River, but the country in that vicinity had only been roughly explored and nothing was known of the elevation of the height of land which separated the streams, or of the character of the district through which the diverting ditch would have to be constructed.

In October an investigation to determine these questions was undertaken, the results of which are shown on the accompanying plan.

It will be seen from the foregoing plan that the scheme of diverting water from the Elbow River, during high water or flood discharge, is a feasible one, and that no serious engineering questions are involved in carrying it into operation.

The north fork of Fish Creek heads about half a mile from the Elbow River, and from this point there is a well defined valley running through to the latter stream in which the height of land is about fifty feet above the Elbow River. The fall in this stream was found to be about 51 feet in a mile, and a ditch 1¾ miles in length, located as shown on the plan, would serve to deliver any desired quantity of water in the channel of the north fork of Fish Creek.

An examination of the banks of the valley in question, and also of those along the Elbow River, proved that no serious obstacle would be met or heavy work involved in constructing such a ditch, and as the valley of the north fork of Fish Creek affords many favourable sites for the construction of reservoirs, in addition to the one located and surveyed as shown by reservoir schedule, the possibility of providing a constant flow in this stream during the irrigating season by construction of the ditch shown above, with necessary reservoirs, is clearly proved and will doubtless be undertaken at an early date.

DIVERSION OF WATER FROM RED DEER RIVER AND LITTLE RED DEER RIVER INTO THE ROSEBUD RIVER.

In that portion of the arid region lying to the north and east of Calgary there is a large area of country having a good soil and favourable climate, as far as temperature is concerned, but which is almost entirely devoid of water supply.

The district is traversed by the Rosebud River, Knee Hill Creek and Three Hills Creek, but these are streams in name only, carrying considerable volumes of water during the period of melting snow or exceptional rainfall, but ceasing to flow at many points during the summer months, and affording an insufficient supply of water even for domestic purposes. The grass in the district is good, but owing to the scarcity of water its value for grazing purposes is small.

The reclamation of this large area by irrigation, or even the providing of a constant supply of good water for domestic and stock-watering purposes, is deserving of serious consideration, particularly at the hands of the different railway companies owning large blocks of land, which under present circumstances are useless.

The Rosebud River traverses the central portion of the district from west to east, and in the upper and lower portions of its length is contained in a deep and well-defined valley with banks precipitous in places and of considerable height. In the central portion the channel is very little below the level of the surrounding country, and many favourable sites for easy diversion of water from the channel to the adjacent bench land occur.

The beds of the lakes situated in the upper portion of the Rosebud valley, and different portions of the valley itself, offer very favourable sites for the construction of reservoirs for the storage of water, and the channel of the stream affords a canal already constructed for the distribution of water through the district, it was therefore considered a question of first importance to determine the possibility of augmenting the flow of water in the Rosebud, by the diversion of water from some of the streams to the west of the height of land in which it takes its rise.

In the latter part of October an exploration was made of the country lying between the head of the Rosebud River and the Red Deer River, with a view of determining the possibility of diverting water from the latter stream into the Rosebud, and through its channel to the arid areas traversed by it. The results of this exploration are shown on the accompanying sketch plan.

The elevations taken in connection with the above exploration are barometric, but they were carefully determined, and are probably sufficiently accurate to enable us to say that the proposed scheme is feasible, and that no serious engineering obstacles are likely to be encountered in carrying it into operation.

The scheme may be briefly outlined as follows :—It is proposed to construct a canal from the Red Deer River into the Little Red Deer River about the location shown on the accompanying plan. This ditch or canal would be some 12½ miles in length, and, with the exception of the portion along the valley of the Red Deer River, passes through a country which offers no serious obstacle to its construction. The water from this canal is run into the Little Red Deer River and flows with this stream for about three miles, it is then diverted, with the augmented flow, into a canal which runs almost due south along the west side of the valley of Dog Pound Creek until sufficient elevation is attained to cross this stream at grade or with a low flume, when the canal turns sharply to the north and follows the east bank of the valley until the height of land is reached and water delivered into the small lake at the head waters of the Rosebud River, the length of this second canal being about 21½ miles.

The gaugings of the two streams which are to be used as a source of supply in this scheme, taken at the time of the exploration, are as follows :—

Streams.	Measured Flow of Water.	Calculated Discharge at High Water.
Red Deer River	539·9 second feet	7203·0 second feet.
Little Bow River	30·0 do	624·0 "

It will at once be seen from these measurements that even at low water flow in these streams, at which stage the rivers stood when these gaugings were made, a large volume of water is available for the reclamation of areas at present useless, and, by constructing reservoirs to conserve the high water discharge, the supply is probably equal to any demands which are likely to be made upon it.

In the absence of the data which would be provided by a proper instrumental survey of the proposed location of these canals, no reliable estimate of the cost of construction can be given, but the information provided by our exploration and gauging of the stream is sufficient to warrant the statement that water can be diverted into the Rosebud River in the manner proposed, and that the large area of arid land adjacent to this stream can be reclaimed through this agency and be made available for pasturage, even if the water is not diverted from the stream for irrigation. It is also reasonably clear that if the scheme were projected on a basis to supply immediate wants, with the possibility of enlargement when needed, the cost of construction should not be excessive.

It should also be noted that a very considerable area of good land will lie under the proposed canals in the valley between the Red Deer and Little Red Deer Rivers, and along the Dog Pound Creek, and that this land could be easily irrigated therefrom.

TOPOGRAPHY.

The system under which our topographical work was performed has been discussed in the general remarks regarding our irrigation surveys. The results of the topographical work completed during the past season by Division A are shown on the general map accompanying this report.

The topography of the area surveyed by the division is of very varied character, comprising the level and open plains lying east of the Bow River, and the high and much broken country north of that stream and in the vicinity of the head-waters of the Elbow River, Fish Creek and Sheep Creek. The 295 miles of line run affords an accurate profile through many portions of the district, and, when supplemented by the contour determinations in the vicinity of these lines, provides at least a good and accurate basis for future detailed surveys of particular areas.

HYDRAULIC WORK.

The hydraulic investigations of the division have been summarized in the general statement of the discharge of streams and springs, and volumes of lakes previously given, but it will be of value to give, in condensed form, a general description of each of the streams examined, with scheduled observations of measured and calculated discharges. For convenience of reference these are taken in regular order from the north, beginning with

RED DEER RIVER.

The Red Deer River is probably the most northerly stream which will be utilized, for some time at least, as a source of supply for irrigation systems. The river heads in the Sawback Range of the Rocky Mountains and flows north-easterly until it reaches Township 39, Range 27, west of 4th Meridian, where it turns sharply to the east and continues on this course as far as Township 38, Range 22, west of 4th Meridian; it then turns to the south as far as Township 29, and then flows south and east to its confluence with the South Saskatchewan River in Township 23, Range 29, west of 3rd Meridian.

In the upper portion of its length the river has all the characteristics of mountain streams, the banks being high, rocky and precipitous and the river much broken by rapids, but after it leaves the foothills, about Range 8, west of 5th Meridian, it rapidly changes in character, the valley widens in places so as to leave large bottoms on either side of a very crooked stream, and the banks are composed of clay and shale heavily timbered in many places. These features prevail until the stream turns to the east, when the valley becomes comparatively narrow and the banks very high and precipitous, with outcroppings of rock and coal.

In its lower portion, for some miles above its confluence with the South Saskatchewan River, the valley again widens so as to leave extensive bottoms on each side of the stream, and the river itself becomes very wide and shallow, and much obstructed by sand bars and islands.

The stream is of considerable size where it leaves the foothills and carries a large volume of water even at low stages; like all rivers heading in a mountainous run-off the Red Deer is subject to periods of flood and low water within comparatively short periods of time, but the usual spring freshet or high water continues as a rule until the end of June, after which the flow gradually decreases to extreme low water, except when affected by periods of heavy rainfall which are rapidly noticeable in the stage of water owing to the fact that this river serves a very large drainage area, and is fed both from the south and north sides by two or three streams of considerable size.

During periods of flood and high water the stream carries a large quantity of silt and much drift, but during mean flow and low stages the water is clear, with a very small proportion of suspended matter.

It is evident from an examination of this stream that any diversion of its waters for irrigation, except for bottom lands along the stream, must be made west of Range 26, west of the 4th Meridian; east of that point the valley is so deep, the banks so precipitous, and the fall of the stream so small, that any attempt to carry the water to the bench land would prove beyond reasonable financial limits.

In considering the question of diverting the Red Deer waters into the arid region it was decided to confine our investigations to a consideration of the possibility of taking the water out at a point high up on the stream and bringing it into the heads of the valleys of the Rosebud River or Knee Hill Creek, both of which head not far from the Red Deer River where it flows north-east, and then traverse a very large area of excellent country in the district lying north and east of Calgary, and finally fall into the Red Deer again on its southward course, but are very small streams, dry in fact, except during spring freshet or exceptionally wet seasons. Their channels however offer an excellent means of distributing the water which can be diverted into their heads, and would serve as a main artery from which the water could be drawn at suitable points to serve the lands adjacent to these streams, which are now valueless owing to the want of water even in sufficient quantities for domestic or stock watering purposes.

The discharge of the Red Deer River on the 16th of October, as shown by measurement given in attached observation, was 540 second feet, and the calculations based on high and flood water cross-sections show that during these heights of stream a very large quantity of water can be diverted for use in irrigation.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Red Deer River.

Meter No. 24. Observer, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Oct. 16.	Twenty chains east of mouth of Raven River.	539·9	7203·0	14429·0	River was at low water stage.

LITTLE RED DEER RIVER.

The Little Red Deer River is the main affluent of the Red Deer River, and is a stream of considerable size even at low water. It cannot properly be called a river of the arid region, for, with the exception of some small open patches near its mouth, it traverses, throughout its entire length of some 95 miles, a wooded district.

The river heads in the Palliser Range on the eastern slope of the Rocky Mountains, and flows east for about 30 miles, when it turns sharply to the north and follows that course to its mouth. Although the catchment area of this stream is large it does not seem to be subject to the extreme differences between high and low water which are noticeable on most of the streams heading in the Rocky Mountains, and its flow is apparently fairly uniform. This is probably due to the fact that the greater part of the catchment area, and the immediate valley of the stream, are more or less densely timbered, and the precipitation either of snow or rain is not run off rapidly.

In the lower portion of its length the fall in the stream is about 20 feet to the mile, and very little sediment is carried except in periods of flood.

The proposed scheme for the diversion of the waters of the Red Deer River into the Rosebud River contemplates the utilization of the channel of the Little Red Deer River for some distance, and the diversion of the flow of the latter, with the water of the former stream, into the Rosebud district.

The measurements of the discharge of the Little Bow River are given in the accompanying schedule.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Little Red Deer River.

Meter No. 24. Observer, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Oct. 13.	In N.W. ¼, Sec. 18, Tp. 34, R. 2, west 5th Meridian.	30·1	624·0	.....	River was at low water stage.

DOG POUND AND BEAVERDAM CREEKS.

The Dog Pound and Beaverdam Creeks drain the country lying south and east of the Little Red Deer River, and join the latter in Township 33, Range 3, west of 5th Meridian. The country adjacent to these streams is high and rolling and sparsely timbered in places, and although the catchment area is large, the runoff is very rapid, and beyond some limited irrigation of bottom lands adjacent to these streams the waters will only be available for bench land reclamation by diversion through the Red Deer-Rosebud Canal.

The determinations of the discharges of these creeks are given herewith.

MEASUREMENT of Flood discharge, High water discharge and actual flow of water in Dog Pound Creek.

Meter No. 24. Observer, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 19	Intersection with north bdy. Sec. 33, Tp. 28, Rge. 4, W. 5th Meridian.	2·4	66·0	.....	Creek was at low water stage.

MEASUREMENT of Flood discharge, High water discharge and actual flow of water in Beaverdam Creek.

Meter No. 24. Observer, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 14	In Sec. 1, Tp. 29, R. 3, W. 5th Meridian.	2·7	51·0	....	Creek was at low water stage.

ROSEBUD RIVER.

The Rosebud is a river in name only. The stream is small except during the time of melting snow, or excessive spring and fall rains, and although it follows a well defined valley, through which no doubt an important body of water flowed at one time, the present stream becomes dry in places during the summer and is not to be depended upon to supply sufficient water even for domestic purposes or watering of stock.

The Rosebud heads in a lake, at present dry, in Township 33, Range 3, west of 5th Meridian, and within about two miles of the Little Red Deer River, it then flows south-east to Township 27, Range 25, west of 4th Meridian, then east through this tier of townships to Range 21, when it takes a sharp turn to the north-east and skirting along the north slope of the Wintering Hills falls into the Red Deer River, in Township 28, Range 19, west of 4th Meridian.

Throughout its entire length the stream runs in an open country; in the upper portion of its course the valley which confines it is well defined and of considerable depth, with some scattered brush and small bluffs on the northern exposure. In the central

part of its length the valley is shallow, and the banks gradually decrease in height as we go east until the river bed is very near prairie level. After leaving Range 24, west of 4th Meridian the valley again becomes well defined, and, as we approach the Red Deer River, the banks are high and broken, with extensive coal exposures in places.

This stream is of no value as a factor in the reclamation by irrigation of the extensive areas of fine country through which it runs, except in so far as its channel can be utilized to bring the waters of other streams to these lands, and, in this particular, nature seems to have especially designed it as a main canal through which to bring the waters of the Red Deer and Little Red Deer rivers and Dog Pound Creek to the arid, and at present useless, areas which are situated on both sides of the Rosebud valley. The soil in this district is good, and it needs but the transforming influence of water to make it the home of prosperous and happy people.

The proposed method of bringing the water of the above mentioned streams into the Rosebud channel has been already referred to. The scheme is such a feasible one, and the beneficial results so certain, that it is to be hoped the necessary works for the diversion of this water will be constructed at an early date.

The valley of the Rosebud at many points in the upper portions of its length is particularly well adapted for storage of water, and in its central portion for easy diversion of the water supplied from the Red Deer and the Little Red Deer Rivers to the adjacent lands, but even if this water is not diverted for irrigation a constant and bountiful supply of pure running water in this valley for domestic and stock watering purposes, will add immensely to the value of the district for grazing and mixed farming, and will open to settlement extensive areas which are now comparatively useless owing to the want of water.

At the date of examination there was no water flowing in the stream, but the calculated discharges at high water and flood level are given below.

MEASUREMENT of Flood discharge, High water discharge and actual flow of water in Rosebud River.

Meter No. 24. Observer, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 7..	At intersection with north boundary, Sec. 32, Tp. 28, R. 27, W. 4th Mn.	No flow.....	10·0	29·0	Figures given are a very rough approximation, it being difficult to locate high or flood water marks or determine slope.

BOW RIVER.

The larger portion of the water for the reclamation, by irrigation, of the bench or higher lands in the north western portion of the arid region must come from the Bow River. This stream heads in Bow and Cold Water Lakes at the head of the Bow Pass and near the watershed of the Rocky Mountains, and flows south and east through the Pass until it reaches the foothill and open country at the "Gap," it then turns to the east as far as Calgary, and thence south and east to its confluence with the Belly River in Township 11, Range 13, west of 4th Meridian. Between its source and the Gap a number of mountain streams flow into the Bow from the different mountain ranges on both sides of the Bow Pass, and almost immediately after leaving the mountains it is joined from the south by the Kananaskis River, which heads on the eastern slope of the Rocky Mountains in large muskegs and lakes lying at considerable elevation, and is a stream of good size and uniform flow.

From the mouth of the Kananaskis to its confluence with the Belly the Bow River furnishes the run-off channel for all the eastern slopes of the Rocky Mountains lying north of the Porcupine Hills, and in this portion of its length it is joined by the Elbow River, Fish Creek and Highwood River, with its tributary Sheep Creek, all of which are streams heading in the mountains or immediate foothills and flowing east until they intersect the Bow in its south-easterly course.

Throughout this portion of its length the Bow River flows in a deep valley, some hundreds of feet below the surrounding bench land, and diversion of its waters for irrigation, except on the immediate bottom lands along its course can only be accomplished within limits of reasonable expenditure at a few points, and it is evident that canals designed to reclaim any considerable area of bench lands must head at or in the vicinity of Calgary.

In the mountain portion of its length the river has a rapid fall, and after leaving the mountains, the fall varies from eight to twenty-five feet in a mile, the fall from Cochrane to the mouth of High River, a distance of about sixty miles following the stream, being 518 feet or about 8·5 feet per mile.

The river throughout its entire length runs in a well defined channel, with banks and bottom of coarse gravel with large stones and some boulders. Excepting during periods of flood or extreme high water, the water in the river is clear and cold, and even in these stages of its flow comparatively little sediment or drift is noticeable.

Owing no doubt to the fact of its heading in Bow and Cold Water Lakes, and receiving therefrom an inexhaustible supply of water from the melting ice of the glaciers which cap the Rocky Mountains in that vicinity, the Bow River is very constant in its flow, and, while like all mountain drainage channels it is subject to rapid and extreme freshets, it does not fluctuate rapidly in its mean discharge, and the period of high water flow is gradual both in its rise and fall, and of considerable duration in its maximum stage.

In considering the question of the discharge of this stream we are restricted to the measurements and observations made during the past season's field operations, and the information regarding the height of the different stages of water and duration of flow at these stages which was procurable from those who had given the matter any attention.

The measurements of discharge at different stages of water at three widely separated points and dates, and the calculated discharges at high and flood stages are given hereunder.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Bow River.

Meter No. 24. Observer, J. S. Dennis.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
June 25..	Six chains N.W. from N. E. corner, sec. 34, Township 24, Range 2, W. 5th Meridian.	9271·0	.....	22632·0	The river was at high water stage when this measurement was made.
Aug. 11..	In sec. 35, Township 21, Range 28, W. 4th Meridian, below mouth of Highwood River.	6654·0	26224·0	41945·0	River at about mean flow.
Sept. 27..	In S.W. ¼, sec. 34, Township 25, Range 4, W. 5th Meridian.	2784·0	12540·0	.....	River was at low water stage

It should be noted in connection with the foregoing discharges that the first and second measurements were made between the Kananaskis and Elbow Rivers, while the third was made below the mouth of Highwood River, and should therefore show the added flow of both this stream and the Elbow River.

The high water discharge, above the Elbow River, was during last season about 9200 second feet, and the low water discharge, measured when the stream was at a low stage of water, and late in the fall, was found to be 2784 second feet. It will thus be seen that the Bow River is capable of supplying a very large quantity of water for irrigation even at low water stage, and that during high water, which usually lasts until well on into the summer months, sufficient water can be diverted to reclaim a considerable percentage of the arid districts lying to the north and east of the stream, and this supply can be largely augmented by providing storage facilities for the very large flood discharge which is indicated by the gaugings given.

The irrigation systems now heading in the Bow are the Calgary Hydraulic Company, and private ditches of Mr. Wm. Maloney, Messrs. Ricardo and Bevan, Mr. A. E. Bannister, Mr. R. N. Newbolt and the Indian Department. All these systems, with the exception of the first, are small and do not materially affect the flow of the stream, it is therefore of importance that any scheme having in view the diversion of a considerable quantity of water for irrigation of the bench lands, should be proceeded with before the matter becomes complicated by the large number of licenses for bottom land irrigation which will be asked for in the next year or two.

BIGHILL CREEK.

The Bighill Creek is a small affluent of the Bow River joining that stream in Township 24, Range 4, west of 5th Meridian. The creek is about twelve miles in length and provides the run-off channel for a considerable area of high and broken country. It flows throughout its length in a deep valley with high, and in many places precipitous, banks. The "big hill" from which it takes its name being a prominent feature situated at the mouth of the valley, on the east side thereof, where it joins the valley of the Bow River.

During the period of melting snow or spring rains this stream carries a considerable quantity of water, but in the latter part of the season it becomes a very small creek, mostly spring fed and of little value except for domestic or stock-watering purposes. The valley offers several favourable sites for the construction of reservoirs, and there is considerable bottom land in the valley which might be cheaply irrigated therefrom.

At present there is a small irrigation system using water from this source for the reclamation of land in the valley of the Bow River, and the extension of this system, and the construction of another which contemplates the irrigation of some two hundred acres of land also situated in the Bow River valley, are to be undertaken during the present year.

The results of the gauging of this stream are as follows;—

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Bighill Creek.

Meter No. 24. Observer, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 25..	½ mile south of intersection with east boundary of Sec. 13, Tp. 26, R. 4, W. 4th Mer.	1·7	61·0		

NOSE CREEK.

Nose Creek joins the Bow River from the north at Calgary. The stream is a very insignificant one during the summer months, having ceased to flow at that season in many places during the past few years, but in the spring a considerable volume of water is discharged into the Bow River from this source, which could be very profitably used in irrigating areas along the creek which are now unproductive, if it was properly conserved in reservoirs erected at some of the many favourable sites offered by the valley.

About six miles north of the Bow River the creek forks, one branch coming from the north and the other, locally known as the West Fork, from the north-west; both branches flow in well defined valleys, that from the north following what is known as McPherson's Coulée, a wide and shallow valley, except at its upper end, which is traversed by the Calgary and Edmonton Railway line, and affords many favourable opportunities for irrigation of bottom lands were the water available.

The valley of the west fork is narrow, with limited areas of bottom lands, and at several points affords most favourable sites for the storage of water by erection of dams.

Nose Creek is the drainage channel for a large catchment area of high, open country, the run-off from which can be readily collected in the valleys of both branches of the creek in reservoirs created by the construction of cheap earth dams, and a very considerable area of hay land, now unproductive, can be reclaimed thereby.

The approximate gauging of the west fork of the creek is given herewith. The north fork was not gauged, but it certainly has a flood discharge of three times that of the west fork.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Nose Creek (west branch).

Meter No. 24. Observer, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 1..	In Sec. 1, Tp. 26, R. 2, W. 5th Mer.	0·7	21·0		

JUMPING POUND CREEK.

The limit between the open country and the foothill or timbered country, in the district between the Bow and Elbow Rivers, is defined by Jumping Pound Creek, an affluent of the former river, which it joins in Township 25, Range 4, west of 5th Meridian.

The Jumping Pound Creek is a typical mountain stream, draining a large catchment area on the eastern slope of the immediate foothills along the eastern slope of the Rocky Mountains. The stream in its upper portion is divided into three forks, which, flowing east and north-east, finally unite in forming the main creek in Township 25, Range 5, west of 5th Meridian, from whence it flows north for about twelve miles to its junction with the Bow River.

The schedule of gaugings given below illustrates the great extremes in flow to which this stream is subject. The measurement made in October gives a close approximation of the discharge at low water during the past year, and is also probably a fair estimate of the discharge at this stage of water, during the past few years, as the information obtained leads to the conclusion that the stream at the time this measurement was made was as low as it has been for some years.

It is claimed by one or two of the old residents of the district that within their recollection the water had ceased to flow in the creek during the late summer months, but when we note the area for which this stream furnishes the drainage channel, and the further fact that although the slopes of the catchment area are steep, the area is largely a timbered one from which the run-off must be comparatively gradual, it is difficult to realize that the stream could become dry, and if such was the case, it must have been for a very short period, and was probably owing to some local cause other than failure in the source.

In the upper and lower portions of its length the Jumping Pound flows in a very deep valley with high and precipitous banks, which preclude the possibility of diverting its waters to the higher or bench lands. At one or two places in the central part of its length the valley becomes wide with banks of easy slope and moderate height and the stream can be diverted by canals which would reach the bench land to the east of the valley, where the water from this source must be used in irrigation, if used at all.

It is stated by those who have explored the district that the middle or south fork of the stream heads in a large muskeg on the divide near the Kananaskis River, and that the water flows from this muskeg both into the Kananaskis and Jumping Pound. If this be true, it is probable that inexpensive works would divert the whole flow into the latter stream and materially increase the available supply for irrigation.

In the upper portion of its length the valley of the Jumping Pound affords many favourable sites for the construction of reservoirs for impounding the high water or flood discharge until needed for irrigation, and it is evident, from the measurements of these discharges given below, that if conserved in that way the stream will supply sufficient water for the reclamation of a large area.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Jumping Pound Creek.

Meter No. 24. Observer, J. S. Dennis.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
June 26..	In Sec. 6, Tp. 25, Rge. 4, W. 5th M.	85·5	.....	1802·0	Stream was at mean summer stage.
do 27..	do do	65·0	.....	1785·0	do do
Oct. 17..	In Sec. 3, Tp. 24, Rge. 5, W. 5th M.	24·6	.....	.....	Stream at low water stage.

THE ELBOW RIVER.

That portion of the district lying to the west of the Bow River, north of Sheep River and south of the Elbow River must, owing to topographical conditions, look to the latter stream for the water supply wherewith to undertake irrigation; this fact will be made apparent from an inspection of Sheet No. 1 of the general map accompanying this report, and of the schedule of gauging of streams in the district, which will illustrate the impossibility of getting water for the larger part of this area except from this source. Fortunately for the future prosperity of this area the Elbow River is a stream which will probably meet all demands made upon it for water wherewith to reclaim these lands.

The Elbow River heads on the southern slope of the Rocky Mountains forming the drainage channel for an extensive catchment area composed of these mountains and the immediate foothills to the east thereof, and it is doubtless owing to this fact that the discharge of the stream exhibits such wide and rapid extremes. From its source the

river flows north-east for some thirty miles, and then turning sharply to east flows in that general direction for some twenty miles to its confluence at Calgary with the Bow River, of which it forms, next to Highwood River, the main affluent.

For the first twenty miles of its course the river flows in a canyonlike valley with high mountains and foothills on either side. It is then joined from the west by a branch stream of considerable size, locally known as the North Fork, which also flows in a deep valley with precipitous banks, and from thence the united streams follow a very winding course in a valley which, in many places, becomes of considerable width with extensive bottom lands and banks of easy slope.

During periods of high water and flood discharge the stream follows many different channels and carries much drift, and changes in the location of the main stream frequently occur. At low water stage the stream is found in some places flowing between well defined banks, while at others it occupies only a small portion of a wide channel with extensive gravel bars on either side, or flows only in one channel, leaving several others dry.

In the central and lower portions of its length the stream has an average fall of about 23 feet in a mile, and this, combined with the gentle slope of the banks of the valley containing it, makes it possible to divert its waters to the high or bench lands of the district, which is now being undertaken by the Calgary Irrigation Company and the Springbank Irrigation Company in the manner previously described.

The possibility of augmenting the flow of water in Fish Creek by the diversion into that stream, and subsequent storage in reservoirs, of a portion of the high water discharge in the Elbow River has been previously referred to in these pages. By the adoption of this scheme the Elbow can be utilized for the reclamation of areas in the valley of Fish Creek which cannot be served from the latter source.

Like many other of the streams in Southern Alberta having a rapid fall and flowing over a gravel bed, the Elbow River in places shows marked indications of underflow, and at points high up the stream considerably more water may be found flowing in the channel than is found at points much lower down, the loss evidently being accounted for by underflow through the gravel, which is forced to the surface again when interrupting impervious strata of rock or clay is met.

The evidences of this underflow are very apparent in many of the small springs and spring creeks to be found on the bottom lands in the valley of the stream, most of which have their origin at about the same elevation as the river, although in some cases they are situated at a considerable distance therefrom.

The large volume of water which may be lost to the main channel owing to this underflow, and the exceeding porosity of the material through which it flows until forced to the surface by some impervious strata, or by a break in the general slope of the valley, is forcibly illustrated by reference to the general discharge schedule, where it will be noted that the spring creek which rises in section 11, Township 24, Range 4, west 5th Meridian, and, after flowing about two miles, empties into the Elbow River, has a discharge of some 22 second feet. This creek is undoubtedly fed by underflow from the river of which it forms a tributary, for its origin is only a short distance from the main stream, is situated on the bottom land of the valley, and is at about the same elevation as the river, and there are no evidences to justify the assumption that even a small portion of this large discharge is supplied from hillside springs having another origin.

The gaugings of the Elbow River secured during last season and scheduled below, with a measurement made by Mr. P. T. Bone, C.E., of Calgary, late in the fall of 1893, indicate that at extreme low water the discharge is about 200 second feet, with a probable maximum discharge during ordinary stages of high water, of some 1800 second feet which is increased to 7000 second feet at periods of flood. In the absence of data as to the duration of flow at these different stages of the stream it is impossible to form any fair estimate of the volume of water available from this source for the reclamation of arid areas, but it is evident that by augmenting the supply which can be diverted from the stream at mean flow by the storage in reservoirs of a portion of the high water and flood discharges, a very large area of country can be served from this source.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in the Elbow River.

Meters Nos. 24. 25.

Observers J. S. Dennis, A. O. Wheeler, T. D. Green.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
June 30.	At intersection with east bdy. Sec. 13, Tp. 24, R. 4, west 5th Meridian.	412·2	1458·0	7368·0	River was at mean summer flow.
Oct. 3.	In Sec. 34, Tp. 22, R. 5, west 5th Meridian.	210·5	.....	.....	Measurement for actual flow only.
June 25.	At intersection with east bdy. Sec. 25, Tp. 23, R. 2, west 5th Meridian.	647·4	2113·0	.....	River was at summer flow.

FISH CREEK.

In times of high water and flood discharge Fish Creek carries a large volume of water, and is worthy of being designated by a more pretentious name, but during the late summer months the flow becomes very small and has, during the past two seasons, ceased altogether in the lower portion of the stream.

The upper portion of the stream is divided into two forks which unite in Township 22, Range 3, west 5th Meridian. The north fork, which is the smaller stream, heads near the Elbow river in Township 22, Range 5, west 5th Meridian, and flows easterly to the junction above mentioned. Throughout its length this branch runs in a deep valley and through a district largely composed of high foothills which are more or less covered with timber; the catchment area, tributary to the branch, is extensive, but the slopes are so great that the run-off is rapid, and early in the summer the stream has become a a mere rivulet. The valley through which this creek flows affords many very favourable sites for reservoirs, in which the spring discharge, and any water diverted into the stream from the Elbow River, in manner previously described, can be stored until it is required during the irrigation season.

The south fork of the stream heads not far from the headwaters of the north fork of Sheep Creek, and after flowing east for fifteen miles, turns sharply to the north, following that course to the junction. In the upper portion of its length this fork flows through the foothills in a deep valley with steep banks, but from the point where it turns north the valley opens out, leaving large bottom lands which are capable of irrigation therefrom. The catchment area for which this fork forms the run-off channel is large, but like that tributary to the north fork the slopes are steep and the runoff correspondingly rapid. The valley of the stream in its westerly portion becomes canyon-like in places, and at some of these points the flood discharge could be cheaply conserved by the erection of earth dams.

From the junction of the two forks to its confluence with Bow river, Fish Creek follows a winding course in the bottom of a wide valley with steep banks, of moderate height on the south and east sides, and of very easy slope in many places on the north and west sides. This valley, excepting that portion situated on the Sarcee Indian Reserve, is thickly settled and considerable progress in the reclamation of the bottom lands by irrigation has been made, but the flow in the stream becomes so small during the latter part of the irrigating season that the largest ditch heading in the stream in its lower portion was, during the past season, left without any water. This condition was, however, not entirely due to cessation of the flow, for at the time when the bed of

the creek was entirely dry a short distance above the headworks of this ditch, there was a considerable quantity of water flowing in the channel some few miles up the stream, and below the head of any irrigation ditch, except the one in question; it is therefore, evident that this water must have been lost in the gravelly bed and banks of the creek and have reached the Bow river through underflow.

The irrigation ditches now constructed, which head in the north or south fork or in the main stream, will appropriate all the available flow at low water, and future systems must look to the high water and flood discharges for their water supply, unless steps are taken, in the direction indicated above, to store the spring run-off in reservoirs until needed during the irrigation season.

MEASUREMENT of Food discharge, High water discharge and actual flow of water in Fish Creek.

Meters Nos. 24. 25. Observers J. S. Dennis, A. O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
July 7.	North Fork, Sec. 19, Tp. 22, R. 3, W. 5th Meridian.	2·7	.....	108·0	Stream was at low water stage.
July 10.	South Fork, Sec. 4, Tp. 22, R. 3, W. 5th Meridian.	3·7	.....	.....	do do
June 26.	In Section 6, Tp. 23, R. 1, W. 5th Meridian.	16·1	657·0	1255·0	Stream was at mean summer flow.

SHEEP RIVER.

Sheep River, or Sheep Creek as it is locally known, is the main tributary of Highwood River, which stream it falls into a few miles above its confluence with the Bow River.

In common with the larger number of the streams heading in the foothills of the Rocky Mountains, Sheep River in its upper portion is divided into several branches or forks. The more important of these, known as the North and South Forks, unite in forming the main stream in Township 20, Range 2, W. 5th Meridian, from whence it flows east to its junction with Highwood River. Before discussing the features relating to the river itself some remarks regarding the characteristics of these main branches are necessary. For a few miles above the junction the north fork, which is some thirty miles in length and follows an almost east and west course, flows in a valley having extensive bottom lands and low banks, but above this point throughout its entire length the branch traverses a foothill and broken country, the valley being deep with precipitous banks and the bottom lands limited in extent. The catchment area tributary to the branch is large, and is almost entirely composed of foothills, which become more or less timbered as we go west, the slopes upon this catchment area are steep and the runoff correspondingly rapid, so that after the period of melting snow and spring freshet has passed, the stream rapidly falls and by early summer becomes insignificant in character. The valley of this branch throughout a great portion of its length is settled with ranchers engaged in stock raising, the majority of whom have constructed small irrigation systems to enable them to raise crops of hay upon the bottom lands adjoining the stream. The nine or ten ditches now in operation heading in this branch of Sheep River are of sufficient capacity to divert the total amount of the flow at low water stages, and future systems must depend upon the high water or freshet flow, or the storage of water at these periods of flow in the stream.

The south fork is the main branch of the stream, heading in the immediate eastern slope of the Rocky Mountains and flowing in a north-easterly direction through the foothills for a distance of some thiry-five miles to the junction above mentioned. This fork is a stream of considerable size even during the late summer months, and the uniformity of its flow indicates the probability of its being supplied from large springs or glacial sources in the mountains. For some miles above the junction the valley of the stream is wide with extensive bottom lands capable of easy irrigation therefrom, and the slopes of the banks of the valley are such that it is probable the water from the fork might be diverted to the bench lands. In the upper portion of its length the stream is confined to a narrow valley, canyonlike in places, which winds about among adjacent foothills that in places become mountainous-like in height and appearance, and are covered in many places with good timber which is floated down the stream to mills situated near its mouth. The catchment area, of which this fork forms the drainage channel, covers an area of at least two hundred square miles, but the slopes in this area are exceedingly steep and the runoff correspondingly rapid. There are numerous sites in the valley of the stream, and in the adjoining broken country, for the conservation of this runoff, and the large area of good land capable of being served with water from this source will doubtless warrant the construction of such reservoirs at an early date.

From the junction of the north and south forks to its mouth the main stream traverses a wide valley with extensive bottom lands and some easy slopes on both sides capable of being irrigated therefrom.

The gaugings given below indicate the wide range in the discharge of this stream, and the rapidity of the runoff from the catchment area drained by its channel is shown by the fact that the high water discharge is of comparatively short duration, and in ordinary seasons the stream falls to mean flow in the early summer months. These sudden and extensive freshets have created a wide channel, which at low water is largely composed of high gravel bars covered in many places with drift and debris, and which divide the low water flow into many small channels.

MEASUREMENT of Flood discharge, High Water discharge and actual flow of water in Sheep River.

Meters Nos. { 24. 25. } Observers { J. S. Dennis, A. O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
July 3.	In sec. 26, Township 20, Range 2, W. 5th Meridian.	257·0	15457·0	.....	River was at summer flow
do 23..	In sec. 24, Township 20, Range 29, W. 4th Meridian.	159·1	12463·0	.....	River at mean flow.
do 12..	(N. Fork) at N.E. corner, sec. 2, Township 21, Range 3, W. 5th Meridian.	3·0	1118·0	.. ..	

HIGHWOOD RIVER.

Highwood, or High River as it is more commonly called, is the largest tributary of the Bow River, and is destined to play an important part in the reclamation of extensive areas in the north-western portion of the arid region ; it traverses one of the finest districts and at periods of lowest flow is capable of supplying a large quantity of water for irrigation.

Heading in the northern end of the Livingston Range of the Rocky Mountains the stream flows easterly in three branches, known as the North, Middle and South Forks, through the immediate foothills to the east of the Mountains and north-west of the

Porcupine Hills, and these branches finally unite in forming the main stream in Township 17, Range 1, W. 5th Meridian, from whence it flows north-east for about twelve miles, and then turning suddenly north follows that course for some seventeen miles to its confluence with the Bow River.

The gaugings of the river effected last season, and scheduled below, indicate that at low water the discharge is probably about 500 cubic feet per second, which is increased at high water to some 8000 cubic feet per second, and at flood discharge to 20000 feet. It is also evident from the information obtainable that the period of high water continues for a considerable time, and that extreme low water discharge is not reached until late in the season.

The catchment area drained by this stream is extensive, and comprises within its limits the high mountains on the north-eastern slope of the Livingston Range, the timbered and broken foothills to the east of the Mountains, and the high open country traversed throughout its middle course. The slopes in this area are steep, but the evenness of the flow seems to indicate that the run off is not so rapid as is the case with most of the streams in the district, however, this feature in the flow may be due to glacial sources or large springs, which further exploration of the headwaters of the stream will disclose.

The three branches forming the upper portion of the river have all the characteristics of mountain or foothill streams, flowing in deep valleys with steep and precipitous banks, with occasional widenings of these valleys where considerable bottom lands are available for grazing or cultivation; these valleys offer many favourable sites for the construction of reservoirs for the storage of storm waters, or spring freshets, with easy facilities for construction of the ditches necessary to bring this stored water to the adjacent high or bench lands.

Below the junction of the different forks the valley of the stream becomes wide, and the river flows at a level very little below that of the adjacent bottom lands, which are of the richest character. This condition prevails until we reach the north boundary of Township 19, where the valley becomes narrow and canyonlike, with very high banks exhibiting fixed rock in many places, and it maintains this character until the mouth of the stream is reached.

Upon its upper branches the stream has a rapid fall, and the bed is largely composed of gravel and some boulders. In the central portion of its length the river flows with a much more gentle slope, becoming quite sluggish in places with banks and bottom largely composed of clay. In the lower reaches the slope again increases, and below the mouth of Sheep Creek in several places the river flows over ledges of fixed rock with rapid fall in short distances.

It is evident, from an inspection of the topography of the district traversed by Highwood River, that the larger portion of its waters will be utilized in the reclamation of lands situated to the south and east of its course, and that diversion of the water must be made in the upper or middle parts of its length. At the present time there are one or two systems of considerable size utilizing water from this source for the irrigation of bottom lands in the middle portion of the stream, and several small systems taking water in the same vicinity, but as yet no effort has been made to divert water to the bench lands lying outside the immediate valley. The investigations so far completed lead to the conclusion that water can be diverted from the river to the south in Township 18, Range 1, west of 5th Meridian, through a well defined valley, locally known as Squaw Coulée, into Mosquito Creek, and thus convert what is now a poorly watered district into a very desirable locality. It is, however, by the diversion of water from Highwood River into the Little Bow River that the greatest amount of benefit will be conferred on the country at large. The proposed method of accomplishing this is shown on the general map accompanying this report, and the details are fully treated of in the remarks regarding the latter stream given below.

MEASUREMENT of Flood discharge, High water discharge and actual flow of water in Highwood River.

Meters Nos. {24. 25.

Observers {J. S. DENNIS. A. O. WHEELER.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
July 9.	In Sec. 5, Tp. 18, R. 1, W. 5th M. (close to west boundary).	893·7	8793·0	23538·0	
do 19.	At north boundary of Sec. 32, Tp. 20, R. 28, W. 4th M.	667·9	14650·0	.....	River at about mean flow.
do 9.	In Sec. 1, Tp. 18, R. 2, W. 5th M. (north fork).	907·8	4692·0	11408·0	
do 11.	In Sec. 36, Tp. 17, R. 2, W. 5th M. (south fork).	23·5	5153·0	7131·0	Below junction with middle fork.
do 13.	In Sec. 4, Tp. 17, R. 2, W. 5th M. (south fork).	3·9	395·0	1188·0	Above do do

LITTLE BOW RIVER.

The streams of the arid region are of two kinds, those carrying mountain and foothill drainage, and those which carry plains drainage only. Among the former may be classed the larger majority of the rivers and creeks above described, and of the latter probably the best example which we have is the particular river known as the Little Bow.

This river heads in a spring situated in the low bottom land in Township 19, Range 29, west of 4th Meridian, and only a few hundred feet distant from Highwood River at the point where that stream makes its sudden bend to the north. From this source the Little Bow flows in a general south-easterly direction for about one hundred miles, when it joins the Belly River, one of the main drainage channels for south-western Alberta.

Throughout its length the Little Bow flows in a well defined valley, the upper one-third of which has banks of moderate height and easy slope, but the remaining portion gradually increases in depth until the banks become very high and precipitous and much broken with lateral ravines. A careful examination of the existing topography leads to the conclusion that at some far distant time the Highwood River, instead of turning sharply to the north near the source of the Little Bow, flowed south and east through the channel of the latter stream; in fact it is stated that within the knowledge of settlers now resident in the vicinity, and during a period of extreme flood in the former stream, a portion of its waters flowed through this old channel, and careful levels have demonstrated the fact that a very low dam, and a small amount of ditching, with ten or fifteen feet of a cut, would divert the whole stream in that direction.

The spring in which the Little Bow heads is situated, as has been stated, only a few hundred feet from Highwood River, and it is apparent from a casual inspection that this spring is fed from the underflow of the latter stream, and is subject to the fluctuations of rise and fall therein.

In its present condition the Little Bow River is hardly worthy of notice as a source from which to obtain water for the reclamation of lands adjoining it. The summer flow, as shown by the gaugings scheduled below, is almost nothing, in fact in places this flow ceases altogether during late summer months, and the high water and flood discharges, although of considerable volume, are so rapidly run off and evaporated as to be of little benefit. The whole value of this stream, from an irrigation standpoint, may be said to lie in the particularly favourable conditions which its valley offers for the diversion of water into it from Highwood River, and conveyance therein to points where it may

again be diverted to serve the extensive areas of grazing and agricultural land through which it flows.

The proposed method of accomplishing this diversion is shown on the general map accompanying this report. It will be noted that the area which can be reclaimed by this scheme can be largely increased by the storage of storm waters in the large natural reservoir lying to the east of the head of the Little Bow, until such time as they are needed to augment the flow therein.

MEASUREMENT of Flood discharge, High Water discharge and actual flow of water in Little Bow River.

Meters Nos. { 24. 25. } Observers { J. S. Dennis, A. O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
July 28..	In Sec. 31, Tp. 16, R. 26, west 4th Meridian.	.....	326·0	993·0	
Aug. 1..	At east boundary of Sec. 12, Tp. 15, R. 26, west 4th Meridian.	....	191·0	.....	
do 2..	In Sec. 1, Tp. 18, R. 28, west 4th Meridian.	3·1	.....	.....	Measured for actual discharge only.

CANADIAN IRRIGATION SURVEY.

DIVISION B.

REPORT OF ARTHUR O. WHEELER, D.L.S.

DEPARTMENT OF THE INTERIOR,
TOPOGRAPHICAL SURVEYS BRANCH,
OTTAWA, 25th March, 1895.

To J. S. DENNIS, Esq., D.T.S.,
In charge of Canadian Irrigation Surveys.

SIR,—I have the honour to submit the following report of the field work of Division B of the Canadian Irrigation Survey during the months from June to October, inclusive, of the year 1894.

A letter from the Surveyor General, dated the 4th of June, instructed me to place myself under your direction in connection with Canadian irrigation surveys, about to be initiated, and in accordance therewith I at once proceeded to Calgary and commenced the organization of a party.

On the 13th June, the organization being completed, work was begun and carried on uninterruptedly until the end of October, at which time the party was recalled and disbanded.

LOCATION OF WORK.

In accordance with your written instructions, dated 16th June, 1894, the work of this division was located in southern Alberta, in the high bench land country lying immediately to the east of the foot-hills of the Rocky Mountains, and consisted primarily in carrying an accurate line of levels south to the International Boundary line from the north east corner of Township 24, Range 2, west of the 5th Meridian, situated a few miles north-west of the city of Calgary, the elevation above sea level of said corner having been first established as an initial point of reference for the division. This line of levels followed township meridian outlines previously established under the land surveys system. The outlines so followed were selected with a view of keeping as close as possible to the easterly margin of the foot-hills country without actually entering the same. Base and correction lines were utilized when it was found necessary to obtain a more easterly or westerly position in the order of march southwards.

In this manner it was proposed to intercept the entire water supply from the subtended catchment area of the eastern slope of the Rocky Mountains, and at the same time to derive, in so far as the rapid nature of the survey would permit, an approximate estimate of the amount of water available for the purposes of irrigation in the plains district lying to the east, together with some idea of the facilities afforded by the character of the country for carrying this water supply, or such portion of it as could be utilized, to points of distribution.

Moreover accurate elevations were thus obtained of the water surface of the streams encountered at points, in the neighbourhood of which, viz: soon after their exit from the foot-hills country, it would be necessary to tap many of them in order to divert water for application to irrigable areas in the plains lying farther east.

The subsequent work of Division B lay for the most part south of the outline between Townships 16 and 17, or 5th Base line, and east of the north and south line of levels referred to, the work being limited on the south by the 49th parallel of latitude or International Boundary line. This portion of the survey was of a similar nature, consisting chiefly in carrying accurate levels over certain township lines selected so as to divide the country into blocks of from four to twelve townships, the smaller blocks embracing broken and hilly areas, and the larger those of a more level character.

METHODS OF SURVEY.

SCOPE OF TOPOGRAPHIC WORK.

The limited appropriation, the large tract of country to be covered, and the numerical weakness of the field force combined to necessitate the adoption of rapid, and in some respects temporary methods.

As has been already stated it was decided to utilize certain township outlines of the Dominion lands survey system as a base of operations, and to carry accurate levels over those selected with spirit level and rod. Mr. R. A. Davy, C.E., was placed in charge of this portion of the work of the division. In August, Mr. Davy being compelled by private reasons to return to the east, Mr. R. W. MacIntyre was appointed in his place and remained with the party until its disbandment in October.

By thus using the lines of the land system—lines established in the first place with the greatest care and subsequently submitted, as the land surveys progressed, to numerous tests of accuracy—the necessity for a system of triangulation was obviated, and in its stead an accurate base of reference, extending in a network over the country, permanently established upon the ground. On either sides of the lines of levels thus projected the adjacent topography, necessary to the compilation of a topographic map, was obtained by methods hereinafter set forth, for a distance of from two to six miles, the operations of the topographers being regulated by the rapidity with which the leveling party moved over the ground. Three and a half miles per day represents the average rate of levelling for the period occupied in field work.

DIRECTION.

In the land surveys system townships are laid out in nearly rectangular blocks of six miles square with a slight addition for road allowances. They are bounded on the east and west by meridians, and on the north and south by chords of parallels of latitude passing through the corners of the townships. The townships number in regular order northerly from the International Boundary line, and lie in ranges numbering respectively, in the section of the country under discussion, westerly from the 4th and 5th Initial Meridians. The initial meridians referred to are 4° of longitude apart. Townships are divided into 36 sections of nearly one mile square by meridians and lines parallel to the north and south boundaries. Sections number from east to west, and from west to east in alternate rows, section 1 lying at the south east and section 36 at the north-east corner of the township. Base lines are situated at intervals of four townships, and are those east and west lines from which the meridians are drawn between the sections north and south to the correction lines midway between them. The want of parallelism of meridians is allowed for in the correction lines. On all dividing lines, section and quarter section corners have been carefully marked upon the ground by planting iron bars, building mounds and digging pits, the degree of care exercised in making these marks of a permanent nature depending upon the importance of the corner.

As a consequence, in carrying levels along the township lines, it was first necessary to retrace and picket them in order to facilitate the operations of the leveller and enable him to obtain elevations at all permanently marked corners. For this purpose a vernier pocket compass, 3½ inch needle with tripod was found sufficiently accurate. The same instrument was used for ascertaining direction in the topographical surveys

conducted on either side of the main line of levels. Owing to the accuracy with which the land surveys have been performed, and the permanent nature of the marks then established, no difficulty was found in obtaining frequent checks upon the compass work, every corner encountered upon a meridian or east and west line furnishing a closing, and at the same time a fresh initial point to work from. Pocket prismatic compasses also were utilized in obtaining direction requiring a less degree of accuracy. In those portions of the country to which the land surveys have not been extended, a four-inch Troughton and Simms transit, D. L. pattern, was used and the requisite township lines temporarily projected for the purposes of the survey.

HORIZONTAL MEASUREMENTS.

All township lines levelled over were first carefully remeasured with a Chesterman steel band 66-foot chain and full details of topography noted. At 5-chain intervals, between the section corners, properly marked wooden pegs were placed by the chainmen for the use of the leveller, who, by pacing his intermediate readings, was thus enabled to plot at night an accurate profile of the work done during each day.

For all other topographical representation horizontal measurements were made, in cases requiring great care, with the chain; in level and rolling country with an odometer attached to a buckboard and by pacing; and in hilly country by triangulation from measured bases. By applying a proper correction to odometer measurements, very fair results have been obtained. Pacing also, with practice and a use of the frequent checks afforded by the land survey lines, has proved advantageous from its rapidity.

VERTICAL MEASUREMENTS.

An 18-inch Y level, with 17-foot telescope rod was used along the township lines levelled over, and profiles of these lines, with sea level as datum, plotted as the work progressed. All other elevations have been obtained from aneroid barometer readings referred to the main lines of levels, and from angular measurements with the transit.

REFERENCE POINTS.

The permanent points of reference or bench marks established by this Division consist of pointed iron tubes with solid heads. They are 5 feet long, $1\frac{3}{8}$ inches in diameter and in every respect similar to those used in marking township corners in the land surveys. Benches were marked by steel dies with a crow's foot ($\overline{/|\backslash}$) the letters B.M. and the odd numbers 3, 5, 7, &c., in rotation. They were placed at township and section corners along the main lines of levels at intervals varying from six to twenty-four miles; also at the nearest conveniently prominent points to all cross-sections of rivers and streams, so that they can be used in connection with subsequent levels taken along such river or stream. In addition to these, similar bench marks were cut with a cold chisel on permanent stone or brick buildings situated in towns or villages through which the main lines of levels passed; also subsidiary bench marks upon fixed rock or large boulders lying close to the said lines. Whenever possible from the nature of the ground, bars were driven to within five inches of the top. In all cases the elevation of the top of the bar was recorded, and of the crow's foot when cut on buildings, rock or boulders.

A map and schedule showing the location and elevation above sea level of all benches accompanies the general report.

The ground elevations at all township and section corners encountered may be ascertained by reference to the profiles of the township lines upon which such corners are situated.

TOPOGRAPHY.

The following remarks apply only to that portion of the district in which topographic surveys have been made and information obtained by this Division during the past season.

It is referred to in the order in which the work was conducted, the principal draining streams being used for the purpose of dividing it into sections. (See map attached to general report showing township lines levelled over).

BOW RIVER TO ELBOW RIVER.

Between the Bow River and its tributary the Elbow an elevated plateau occupies the central portion of Township 24, Range 2, west 5th Meridian, rising 4000 feet above sea level. On the north the land falls sharply to the Bow River Valley, and on the south more gently to the Elbow, affording little or no scope for irrigation beyond the flats along the respective river bottoms. To the east the land falls away from the plateau in gradual and fairly uniform slopes to the junction of the two streams, and a large portion is susceptible of irrigation from the Elbow River. In this connection it may be mentioned that the highest elevation reached on the township outline between Ranges 1 and 2 south of the Bow and north of the Elbow River is, within a few feet, the same as that of the Calgary Irrigation Company's main ditch where crossed by the same outline south of Elbow River.

Westerly the country is broken, and rises gradually in rolling hills and benches to the foot-hills of the Rockies, of which the Jumping Pound Creek may here be said to mark the boundary. Beyond the Jumping Pound are encountered the high sandstone capped ridges and timbered slopes of the foot-hills.

ELBOW RIVER TO FISH CREEK.

The country between these two streams consists of rolling bench land rising in the centre to an elevation of very little more than 100 feet above the escarpments of their respective valleys. It falls away easterly in gentle slopes to the valley of the Bow River. A similar character of country prevails to the west with the exception that the ground rises gradually to the foot-hills, a spur of which extends east of the Elbow River to near the centre of the Sarcee Reserve.

A large portion of this area is irrigable from the Elbow River, and at the present time several thousand acres adjacent to the Bow River and lying principally in Townships 23 and 24, Range 1, are subject to the system of the Calgary Irrigation Company now in course of construction. Their main ditch traverses the higher portion of the bench land, taking water from the Elbow River in section 11, Township 24, Range 3, west of 5th Meridian.

FISH CREEK TO PINE CREEK.

The elevation of the water surface of Fish Creek, where crossed by main line of levels along east outline of Township 23, Range 2, west of 5th Meridian, is 3480 feet, and that of dry bed of Pine Creek 3534 feet. Between these two streams the character of the country is rolling bench land, rising to a greatest elevation of 3792 feet on the same outline, the ridges being separated by broad shallow valleys trending in a south-easterly direction. Westerly the country soon becomes hilly and rises rapidly towards the foot-hills, which here approach to near the centre of Township 22 in Range 3. To the east the same rolling character prevails, the slopes becoming longer and the rises more gentle as the Bow River is neared, until the gently undulating bench land lying immediately to the west of that stream is reached.

A considerable portion of this section can be served from the Elbow River, and, at the present time, it is proposed by the Calgary Irrigation Company to carry water to it from their main ditch across the Sarcee Reserve, by fluming Fish Creek somewhere near the north boundary of section 32, Township 22, Range 2, and utilizing the dry bed of Red Deer Lake in sections 13 and 14 of the same township as a reservoir. From this storage basin water can be supplied to the northerly slopes of Pine Creek valley, and to the valleys lying east of the lake.

The supply of water furnished by Fish Creek will little more than meet the demands of the bottom lands along its own valley, while that of Pine Creek is not sufficient for even this purpose.

PINE CREEK TO SHEEP RIVER.

Between Pine Creek and Sheep River lies a broken and hilly ridge, cut by a number of small drainage channels, and occupying almost the entire portion of Township 21, Range 2, the southerly portion of Township 22 in same range and westerly part of Township 21 in Range 1.

Levels were carried over this ridge along the east boundary line of Township 21, Range 2, west of 5th Meridian, the highest elevation attained being 4242 feet at a point 69 chains south of the north east corner of section 13. This point is 708 feet above Pine Creek, and 638 feet above Sheep River, where crossed by same meridian outline. The highest point of the ridge is close upon 4500 feet above sea level.

Westerly the ridge descends in broken slopes to a tributary of the north branch of Sheep River, flowing southerly close to the eastern boundary of Township 21, Range 3; immediately beyond lie the foot-hills. Easterly the broken country extends a distance of two or three miles and then assumes a more gentle character, descending in rolling slopes to the valleys of the Bow and Highwood Rivers. The demands of this eastern portion can be met by diverting water from Sheep River, the probable point of diversion being situated in section 35, Township 20, Range 2, west of 5th Meridian. Up to the present time no attempt has been made to utilize the waters of Sheep River beyond application in a small way to the flats along the river bottom, for the purpose of raising hay crops.

SHEEP RIVER TO NORTH BRANCH OF HIGHWOOD RIVER.

The country lying between the north and south branches of Sheep River is broken and hilly, and may be described as the lower elevations of the eastern flank of the foot-hills. Irrigation is only applicable to flats of small area along the respective valleys of these streams.

South of the south branch a gently sloping plain, some three miles in depth, extends diagonally through Township 20 and north-east corner of Township 19, in Range 2. Water can doubtless be applied here from the south branch, and at the same time may be conducted along the north edge of the ridge terminating in section 2, Township 20, through a gap in the same ridge, south-easterly to a valley leading to Sheep River below the junction of the north and south branches. The gap referred to is situated in sections 1 and 2, Township 20, and section 36, Township 19.

By thus diverting water from the south branch of Sheep River it may probably be applied to irrigable slopes lying west of Highwood River, between Sheep River and Tongue Flag Creek. It would, however, be first necessary to make a more detailed survey, in order to ascertain what area would be benefited, and whether the extent of same would compensate the cost of carrying out such a project.

From Sheep River to north branch of Highwood River a broken and hilly area, cut by the valleys of Tongue Flag Creek, and of a drainage channel for spring flow situated north of the same, extends westerly to the foot-hills, and easterly to near the centre of Townships 19 and 20, in Range 29, west of the 4th Meridian.

On the outline between Ranges 1 and 2, west of the 5th Meridian, the elevation of Sheep River is 3604 feet, the drainage channel referred to 3847 feet, Tongue Flag Creek 3790 feet, and north branch of Highwood River 3685 feet.

The greatest elevation (4307 feet) is attained where the line crosses the eastern extremity of the Big Hills Ridge close to the south-east corner of Township 19. A short distance further west this ridge reaches 4500 feet. It is practically an outrider of the foot-hills, cut off by the valley of the north branch of Highwood River, immediately beyond which lie the foot-hills proper.

Between the ridge and the river the central portion of Township 18, Range 2, is occupied by a gently undulating slope descending gradually to the latter, with scattered hummocks of low elevation. From here to the mouth of Tongue Flag Creek the same gently undulating character prevails, becoming more regular and better adapted to irrigation as progress is made easterly.

This section must look to the north branch of Highwood River for its water supply.

BRANCHES OF HIGHWOOD RIVER.

The junction of the north, middle and south branches of Highwood River takes place in a valley, or more properly speaking, basin of some extent, occupying the entire central portion of Township 17 and that part of Township 18, Range 2, W. of 5th Meridian, lying south of the Big Hills Ridge. It is surrounded by the foot-hills except to the north-east on the north side of the main stream. From the central portion spur valleys extend into the hills north-westerly along the north branch, south-westerly along the middle branch, and southerly along the south branch.

Water may be brought from the middle branch and applied to the central portion lying between it and the south branch; also to the less elevated slopes lying between the foot-hills and the middle and north branches.

The south branch will furnish sufficient water to irrigate the slopes lying between it and the hills to the south east.

The north branch flows in a more deeply-cut valley, and will be required for application to lands lying south and east of the Big Hills Ridge.

The highest elevation of the central portion of this basin between the middle and south branches is close upon 4100 feet, while the elevation of the middle branch on the west boundary of Township 17, Range 2, is not less than 4120 feet.

The elevation of the south branch on the east boundary of Township 17, Range 2 (below its junction with middle branch) is 3718 feet, and of middle branch on west boundary of same township, as already stated, is 4120 feet. From this it will be observed that across Township 17, the middle branch, in a distance of ten miles, has an average fall of about 40 feet per mile.

Although as the point of junction with the south branch is approached, the middle branch flows in a deeply-cut bed, this is not the case near the western boundary of the township, and it is in this vicinity, not far from the present site of the North-west Cattle Company's buildings, that water will have to be diverted for use on the slopes referred to.

From information obtained by this Division, it would appear feasible to divert water from both the middle and south branches of Highwood River to the north branch of Mosquito Creek.

In order to carry out this project it would be necessary to tap the middle branch in either Township 16 or 17 in Range 3, and flume the water so diverted across the bed of the south branch, a small matter where the crossing would be made, and along the western slope of the hills situated to the east, northerly to a valley opening from the hills in section 13, Township 17, Range 2. A coulee, the origin of one of the feeders of the north branch of Mosquito Creek, heads in the same valley in section 20, Township 17, Range 1.

The elevation of the height of land in this valley, between the drainage to the south branch of Highwood River, and that to Mosquito Creek, does not exceed 4000 feet above sea level, while the elevation of the middle branch of Highwood River on west boundary of Township 17, Range 2, is not less than 4120 feet.

A more complete investigation would be required to establish the possibility of this scheme with absolute certainty, and obtain definite information as to the cost and advantage to be derived, the more particularly that it has been ascertained by Division A that water can also be diverted from the main stream of Highwood River to Mosquito Creek by way of Squaw Coulee; by which method it is likely that a larger and more constant supply could be obtained. (*See* report, Division A).

It may be here mentioned that Highwood River and its branches lie within the drainage area of the Bow River, and Mosquito Creek within that of the Belly River. Whether in this case it would be advisable to divert water from one drainage area to another is a matter for future consideration.

GENERAL REMARKS.

The streams mentioned above, with the exception of Mosquito Creek, are all within the drainage basin of the Bow River, and receive their principal supply from spring sources and precipitation along the eastern slope of the Rocky Mountains.

The Elbow River, Fish Creek and Pine Creek are directly tributary to the Bow River, and Sheep River and Tongue Flag Creek to Highwood River, also a tributary of the Bow.

From the foot-hills to the Bow and Highwood Rivers, the general character of the country embraced is that of an irregular broken slope, cut by the valleys of the several streams referred to, and marked by projecting spurs of lower elevations of the foot-hills. This slope becomes much more regular and gentle as the Bow and Highwood Rivers are approached. Beyond, to the east, the country is distinctly of the plains type.

Throughout this section the soil is of a most fertile nature, particularly so the rich alluvial deposits of the valleys, and requires but a very moderate application of water during the driest portion of the summer months, to render it most productive. Unfortunately owing to its irregularity of surface only a small percentage can be considered as irrigable lands.

The elevation of the Bow River where crossed by the township outline between Ranges 1 and 2, west 5th Meridian, is 3421 feet above sea level; of Highwood River (north branch) where crossed by same outline, or at a point nearly due south, 3685 feet, while the highest point between, reaches an elevation of 4307 feet on the Big Hills Ridge, south of Tongue Flag Creek. The elevation of the Bow, about two miles below the junction of Highwood River is 3058 feet, showing a fall of 363 feet from the crossing of the outline between Ranges 1 and 2 to this point, and a fall of 627 feet for Highwood River from the same outline.

Of the streams mentioned as tributary to the Bow, Highwood River is the most important, and it is to this stream and to the Bow, that the country lying east and south must look for its water supply for purposes of irrigation. Next in order come the Elbow and Sheep Rivers; then Fish, Tongue Flag and Pine Creeks. The last three do not yield a constant supply.

For detailed description, discharges, &c., of these streams, see general report of Division A, and below under "Hydrography" (Pine Creek).

HIGHWOOD RIVER TO LITTLE BOW RIVER.

Highwood River, as above stated, is situated within the area drained by the Bow River and is tributary to that stream. The Little Bow, although its origin in the south-west corner of Township 19, Range 2, west of 5th Meridian, is within a stone's throw of the former stream, and is supplied from it by means of underflow, drains south-easterly to the Belly River.

The main line of levels was carried over the divide between these two drainage systems along the 5th base line, situated between Townships 16 and 17.

To the south, the land ascends in rolling hills and ridges to the Porcupine Hills. Northerly and easterly the same character of country prevails, occupying the largest parts of Township 17, Range 1, west of 5th Meridian, and Townships 16, Ranges 29 and 30, west of 4th Meridian. It is in this hilly portion that the several drainage channels contributing to form Mosquito Creek have their origin.

Between Mosquito Creek and the Little Bow the country south of Highwood River is rolling bench land intersected by numerous shallow valleys trending in a general south-easterly direction. Part of this section can be irrigated from Highwood River by diverting water from that stream to the valley of the Little Bow, and from thence to the bench lands lying above.

It has also been ascertained that water can be brought from Highwood River to the north branch of Mosquito Creek by way of a depression or valley running between the two, locally known as "Squaw Coulée," and joining the valley of the said north branch soon after its exit from the hills.

The section of country in which the diversions referred to will have to be made is within that portion of the district covered by the operations of Division A, and the report of that division contains full information concerning their feasibility. They are mentioned here for the reason, that it is thought highly probable that the country lying north of the Oldman River, between the Porcupine Hills and Willow Creek on the

west and the Little Bow on the east, will have to look largely to such water as can be spared from Highwood River for its supply for purposes of irrigation.

Neither the Little Bow nor Mosquito Creek have a continuous flow; that of the former being dependent upon the stage of the water in Highwood River and precipitation, and that of the latter practically upon precipitation alone.

Should the valley of the Little Bow be utilized to conduct water to irrigable lands situated at prairie level, it will be necessary that it be brought to this level before reaching Township 15, as here the bed of the river lies in a deep narrow valley with sides either very steeply sloping or precipitous. The valley of Mosquito Creek, near its junction with the Little Bow, is of a somewhat similar character.

The elevation of Highwood River, at a point opposite the valley of the Little Bow, is 3362 feet above sea level; of the north branch of Mosquito Creek where crossed by main line of levels of this Division on north boundary of section 35, Township 16, Range 29, west of 4th Meridian, 3345 feet; and of the Little Bow River on north boundary of section 1, Township 16, Range 26, 3164 feet. Between the two last mentioned points the greatest elevation attained, at about half a mile east of Mosquito Creek, is 68 feet above the said creek, and from there easterly the ground falls regularly and gently to the valley of the Little Bow.

The elevation of the latter stream on the east boundary of Township 15, Range 26, W. 4th Meridian, along which levels were carried, is 3076 feet and of the bed of Mosquito Creek on the same township boundary 3090 feet. The fall, therefore, of Mosquito Creek between the points of intersection named is 255 feet, or about 8 feet per mile; and of the Little Bow 88 feet, or about 5 feet per mile.

It will thus be seen that the height of land between the drainage areas of the Bow and Belly Rivers occurs but a short distance south of the main stream of Highwood River, and from there on between the Little Bow and Mosquito Creek the surface has a general gradual slope to the south east affording easy facilities for the distribution of water.

A straggling line of hillocks of varying elevation, but not exceeding 150 feet, extends across, near the centre of Township 15, Range 26, from the Little Bow to Mosquito Creek; otherwise the character of the surface may be described as rolling.

East of the Little Bow River, as far as the work of the Division was extended, the same general character of surface exists, with the exceptions that it is more irregular and drainage lines are encountered more frequently.

Moreover, the height of land between the drainage areas of the Bow and Belly Rivers appears to be crossed about the centre of the north boundary of Township 16, Range 26, W. 4th Meridian, for beyond this point the coulees and water courses drain northerly to the Bow River.

It is not unlikely that water from Highwood River can be conveyed by way of the Little Bow valley to this height of land and along the same, distributing on either side.

LITTLE BOW RIVER TO OLDMAN RIVER.

In this section of country, main lines of levels were carried south along the township outlines between Ranges 27 and 28, W. 4th Meridian to the north boundary of Township 12 and between Ranges 25 and 26 to the Oldman River.

The elevation of the dry bed of Mosquito Creek on east boundary of Township 16, Range 28, is 3265 feet above sea level, and from this point south the surface rises steadily along the same outline to a greatest elevation of 3596 feet at 15 chains south of the north-east corner of section 12 in Township 15; from thence it falls gradually to the north-east corner of Township 12 in Range 28, the farthest point to which levels were carried on this outline during the past season. Here the elevation is 3338 feet, only 7 feet lower than the bed of the north branch of Mosquito Creek where crossed by north boundary of section 35, Township 16, Range 29, not far above which point Squaw Coulee joins the valley of the said north branch.

The high land, alluded to above as culminating on the east boundary of section 12, Township 15, extends westerly, retaining its elevation to Pine Coulee, the eastern boundary of the Porcupine Hills. In fact, the dividing ridge or height of land in centre of

Pine Coulee between the drainage north to Mosquito Creek and south to Willow Creek occurs in section 18, Township 15, Range 28, or nearly opposite the highest point of said ridge where crossed by the outline, and is at about the same elevation, viz., 3600 feet.

Easterly the ridge of high land extends a short distance from the outline at the same elevation and then slopes gently towards Mosquito Creek.

From the foregoing it is evident that nearly all the land lying south of Mosquito Creek and west of the township outline between Ranges 27 and 28, as well as some lying east of it, is at too great an elevation to be benefited by water diverted from Highwood River by way of Squaw Coulee; and further, that any water so diverted must be carried north and east of the high land, not far from the location of the Calgary and Edmonton line of railway and in all probability to the east of it.

From the crossing of the Little Bow River and Mosquito Creek on the township outline between Ranges 25 and 26, southerly to Willow Creek and the Oldman River no elevation is attained greater than that of the bed of Mosquito Creek where its valley is joined by Squaw Coulee, through which coulee it is probable water would be diverted from Highwood River to be applied to this section.

The greatest elevation, 3311 feet, is encountered on the ridge crossed by the east boundary of section 24, Township 10, Range 26, immediately north of the Oldman River, and the next greatest elevation, 3234 feet, is at the north-east corner of section 25, Township 12, Range 26. The former is 34 feet lower and the latter 111 feet lower than the bed of Mosquito Creek at the point above referred to.

The lowest elevation, 3119 feet, recorded on the said outline, between the points mentioned, is the dry bed of a lake situated partly in the south east corner of Township 14, Range 26, and partly in the south-west corner of Township 14, Range 25. This depression is well suited for a storage basin of considerable capacity, provided the fall to south east is sufficiently great to admit of water being carried from it in that direction. It would, however, require a more detailed survey to ascertain the capabilities in this respect. The main line of canal from Highwood River would of necessity be constructed at a greater elevation to the west between it and the Calgary and Edmonton Railway, and little difficulty would be met in conducting water to the lake bed by way of a natural drainage channel leading to it through Townships 14, Ranges 26 and 27.

Between Mosquito Creek and this drainage channel, the surface is of a rolling lumpy character which, while poorly suited to advantageous distribution of water, will furnish a number of small reservoir sites from among the dry beds of small lakes and sloughs with which it is dotted.

The same character of surface prevails eastward to the Little Bow River.

From the dry lake bed referred to, the surface rises gradually south and west to the ridge mentioned as being crossed by the east boundary of section 25, Township 12, Range 26, and then falls again in gentle undulations extending westerly to the Calgary and Edmonton Railway line and easterly as far as the operations of the division were carried during the past season. It is here that the irrigation engineer will be in his glory, and what is now the domain of the cowboy can be made to bloom like a garden, a centre of fertility.

From the crest of the ridge crossed by the east boundary of Township 10, Range 26, the land falls sharply to the escarpment of the mutual valley of Willow Creek and Oldman River, viz.: from an elevation of 3311 feet to one of 3103 feet, or very nearly 210 feet in five miles.

Agricultural lands lying along the south slope of this ridge must look to Willow Creek for their water supply, the wide and deep valley of that creek cutting off communication from the Oldman River.

Although the close of the season during which work could be done in the field curtailed the investigations of the division in this direction, and the actual value of the Porcupine Hills and Willow Creek as accessaries to the application of irrigation to this section of country are practically unknown, a few words concerning them may not be amiss.

The Porcupines are a high range of hills extending easterly and southerly from the main foot-hills of the Livingstone Range of the Rocky Mountains in the shape of a

tongue, the root or junction being at the northerly end and the point or tip defined on the south by the course of the Oldman River.

Behind, to the south between these hills and the mountains lies a broad and fertile valley, from six to twelve miles in width, extending northerly for about a third of their length. Through this valley and bounding the same on the north flows the north fork of the Oldman River; while the junctions of the north, middle and south forks take place near its entrance. The hills rise to an elevation of 5400 feet above sea level. They are of sandstone formation covered by a rich loamy soil, of great depth and fertility in the valleys, and are timbered to a considerable extent with spruce, jack pine, poplar and cottonwood. The opens furnish most luxuriant pasture lands.

From an irrigation point of view they supply a valuable catchment area for the precipitation of the winter months; the run-off draining northerly to the south branches of Highwood River and Mosquito Creek, westerly and southerly to the Oldman River and easterly to Willow Creek.

It is proposed to conduct the topographical survey of this part by means of "Photo-topography," the elevations being too great and the surface too much broken for the application of methods entailing the use of the spirit level and rod.

It will no doubt be found upon careful investigation that by locating and constructing storage basins in these hills the present volume of Willow Creek and other streams receiving their supply therefrom can be regulated so as to make them much more useful factors in application to irrigable areas.

It is highly probable that Willow Creek can be utilized to irrigate lands above its bed at prairie level both to the east and west, and as before stated immediately north of the Oldman River; also that for lands situated to the east the diversion would require to be made not far from the mouth of Pine Coulee and for lands west, lower down the stream below the junction of Trout Creek. As previously suggested further investigation is necessary before making definite statements in this connection. Opposite the mouth of Pine Coulee the elevation of Willow Creek is 3334 feet, and at crossing of township outline between Ranges 25 and 26 is 3018 feet, giving a total fall of 316 feet in about 58 miles, or about 5.5 feet per mile.

Throughout the bulk of the tract of country just described, the soil is of a rich fertile nature, consisting chiefly of an alluvial deposit of sandy loam, varying in depth and richness, over a light clay. There are, however, parts in which the soil is not so fertile, where indications of alkali appear on the flats and the elevations are composed of sand and gravel; but this character of soil is a small percentage and does not apply to the portion to which irrigation is best applicable.

BETWEEN OLDMAN RIVER AND BELLY RIVER.

The Oldman River is tributary to the Belly, joining it at Fort Kipp in section 27, Township 9, Range 23, west of 4th Meridian. The Waterton River, an important stream, discharging more water than the Belly, also joins it in section 1, Township 7, Range 25. The source of the Belly River is situated in the mountains in Montana Territory. The Waterton is the outlet of a lake of the same name in the mountains, partly in Alberta and partly in Montana. The two streams flow in a nearly parallel course gradually converging to their junction, the distance between them in no place exceeding eight miles.

Between the Oldman and Waterton Rivers the most striking natural feature is the mesa-like ridge known as the "Ridge between the Rivers."

This ridge occupies the westerly third of Township 7, Range 25, the southerly third of Township 8, Range 26, all of Township 7, Range 26, and northerly portions of fractional Townships 6, Ranges 27 and 28; as well as the south-easterly quarter of the Peigan Indian Reserve. The plateau-like portion of the ridge stands at an elevation varying from 3700 to 3800 feet above sea level.

Main levels were carried south from the Oldman River along the township outline between Ranges 25 and 26 to the Belly River; along the 3rd base line, between Townships 8 and 9, from the Belly River westerly to the trail from Macleod to Pincer Creek, passing close above the Oldman River; and south-westerly along the said trail, as

surveyed last season by D. T. S. Wilkins, as far as the 1st crossing of Pincer Creek. Opposite this point levels were taken to obtain the elevation of the water surface of Oldman River. The recall of the field party in October closed operations in this direction. On the south, levels were carried along the 1st correction line, between Townships 2 and 3, from the Belly River to the Waterton River.

From the "Ridge between the Rivers" the land falls northerly to the Oldman River and easterly to the Belly River in gentle rolling slopes. All this section is well adapted to the application of irrigation and its requirements can be easily supplied from the Oldman River.

The points of special difficulty to be overcome in the transportation of water from the source mentioned are the valley of Pincer Creek, the valley of Crowlodge Creek, locally known as "Scott's Coulee" and a spur of the "Ridge between the Rivers" extending northerly on the east side of Crowlodge Creek to the valley of the Oldman River.

The elevation of the water surface of Oldman River in south-east ¼ section 13, Township 7, Range 29, west 4th Meridian is 3352 feet, and of the same river where crossed by the east boundary of Township 9, Range 26, is 3024 feet, showing a fall of 328 feet in about 34 miles or 9·7 feet per mile. The elevation of bed of Crowlodge Creek where crossed by Pincer Creek Trail is 3278 feet, and of spur of "Ridge between the Rivers" at highest point crossed by same trail 3373 feet; northerly between this point and the river, the ridge assumes a greater elevation of 3385 feet and from thence on falls to the valley of the Oldman.

Immediately beyond this spur is a shallow valley, the bottom of which, where crossed by the trail, has an elevation of 3293 feet. It will, most probably, be a valuable accessary in conducting water to the sloping plains lying between the Belly and Oldman Rivers, north and east of the central ridge or mesa referred to. It leads through, north-easterly, directly below the ridge, and has a very slight and regular fall. The elevation at the point where the surveyed trail from Macleod to Pincer Creek crosses the north boundary of Township 8, Range 27, is 3158 feet, and, from here on, the general slope of the surface is a gradual fall, north and east between the rivers. The elevation of the Belly River, where crossed by the north boundary of Township 8, Range 24, is 2944 feet.

West of the "Ridge between the Rivers," between Crowlodge and Pincer Creeks and south of Oldman River, is a gently undulating plain, apparently well suited to the application of irrigation. It extends southward to Foothill Creek and some little distance beyond Indianfarm Creek to near the north boundary of Township 5, Range 29. A hilly ridge reaches southerly along the east side of Pincer Creek and north of Indianfarm Creek, but it is thought that no serious obstacle will be offered by it to the application of water in the plain referred to, provided it can be carried across the valley of Pincer Creek from the Oldman River. The supply yielded by Pincer Creek is small and not constant.

A fertile tract of considerable area extends south and west between Pincer Creek and the foot-hills, which here project well into Range 2, west 5th Meridian. This tract reaches northwards between the south and middle forks of the Oldman River; also west of the north fork in the gently undulating valley, previously referred to as lying between the Porcupine Hills and the Livingstone Range. It is terminated by the said hills some few miles north of the north fork.

The facilities afforded by the several streams traversing this tract, for irrigating it, should the same be required, are unable to be reported upon, the operations of Division B not having been extended thus far. It will most probably be included, to a large extent, in future surveys performed by methods of "phototopography." It can be said, however, that it comprises some of the very best agricultural and pasture lands; the soil consisting largely of a rich clay loam, and in many places a stiff clay well suited to the growth of wheat.

South of the north boundary of Township 5 and west of the Indianfarm Creek, the surface becomes heavily rolling and hilly and soon rises to the foot-hills.

The Waterton River flows in a deep narrow valley with steeply sloping and precipitous banks, that in places, might almost be called a cañon. Whether water can be

diverted from it for application to slopes lying south of the "Ridge between the Rivers" and west of the Belly River, is a matter that requires further investigation.

The elevation of the water surface where crossed by the 1st correction line, between Townships 1 and 2, early in September, was 4091 feet above sea level; and of the same stream where crossed by the east boundary of Township 6, Range 26, about the middle of August, 3223 feet, giving a fall of 868 feet between the points mentioned.

Between the Belly and Waterton Rivers lies a high rolling ridge. Levels were carried across the same along the south boundary of Township 3, Range 28, West 4th Meridian.

The summit or height of land between the two streams is crossed 27 chains west of the south east corner of section 6 in the said township, at an elevation of 4564 feet. Northerly the ridge extends some two or three miles at about this elevation and then falls away gradually to the junction of the two streams. Southerly the same ridge extends about a mile before commencing to fall towards Crooked Creek. The summit of the ridge is 470 feet above the bed of the Waterton River and 570 feet above that of the Belly River on the township boundary mentioned.

Beyond the Waterton to the west are lateral ridges, rising in long slopes from the east to a high elevation and then falling in steep, almost precipitous, descents on the mountain side. They increase in elevation and become more rugged until at length the rocky walls of the mountain are reached.

The course of these two streams is nearly parallel to within a few miles of their junction. The greatest distance between them but little exceeds five miles and the bends are very nearly identical. The height of land between the two follows close along the Waterton, allowing the bulk of the surface to slope towards the Belly. It is highly probable that any portion subjected to irrigation will be served by water diverted from the Belly River. A large part of the northerly half is high rolling bench land well adapted to the application of water.

The Belly River where crossed by the south boundary of Township 3, Range 28, has an elevation of 3992 feet, and on the east boundary of Township 5, Range 26, of 3301 feet, or a fall of 691 feet in about 35 miles, very nearly equalling 20 feet per mile.

BETWEEN BELLY RIVER AND ST. MARY RIVER.

Two-thirds of the tract lying between the Belly and St. Mary Rivers, north of the International Boundary Line, is occupied by the Blood Indian reservation. It includes all that portion contained between the two rivers by an east and west line situated very nearly two miles north of the 1st correction line, between Townships 2 and 3.

Main lines of levels were carried over the above area, southerly along the outline between Ranges 25 and 26 and northerly between Ranges 22 and 23, West 4th Meridian; also in an east and west direction along the north boundaries of Township 8, Township 4 and south boundary of Township 3. Where necessary, the above lines were projected across the Indian Reserve for the purposes of the survey.

The reserve comprises some of the very best agricultural and pasture land in the entire district and offers exceptional facilities for irrigation.

In general character the surface presents a high rolling prairie, sloping north-easterly between the rivers. The height of land is situated nearer the St. Mary than the Belly River.

A spur of the lower foot-hills, known as "Breastwork Hill," extends across the south boundary some three or four miles into the reserve, reaching an elevation of 4300 feet above sea level. About the centre a line of broken hilly country reaches from "Mokowan Butte," above the Belly River, south-easterly to the St. Mary. With these exceptions, and an elevation known as "Wild Turnip Hill," rising 3450 feet above sea level and occupying the northerly extremity of the reserve, the character of the surface is as described above.

Water for purposes of irrigation can readily be conveyed to the southern and central portions from both the Belly and St. Mary Rivers, particularly so from the former; and would probably be most advantageously diverted from that source, opposite Township 4 in Range 27, or even farther up the stream.

A deep water-course, entitled "Bullhorn Coulee," rises in the hills south of the reserve and, passing to the west of Breastwork Hill, trends northward, joining the Belly River valley near where the outline between Ranges 25 and 26 crosses the same. This channel carries a considerable quantity of water early in the spring, although nearly dry during the summer months after its flow ceases. It drains a catchment area of some extent, and in all probability a large portion of the spring flow could be stored for use during the drier part of the growing season. It is, however, feared that its valley will furnish a serious, although not insurmountable, obstacle to the diversion of water to this central portion.

For irrigable areas lying on the eastern slopes of the reserve, it is thought that the St. Mary River would require to be diverted below the mouth of Lee Creek, as otherwise the valley of that stream might prove a most objectionable hindrance.

Whether water diverted from the Belly or St. Mary Rivers in the vicinity of the points mentioned can be conducted beyond the line of hilly country referred to as extending south-easterly from Mokowan Butte, is a matter for detailed investigation.

On all sides of Wild Turnip Hill lie gentle rolling slopes well adapted to the application of water.

The elevation of the Belly River on the south boundary of Township 3, Range 28, is 992 feet above sea level; on north boundary of Township 4, Range 27, is 3492 feet: on east boundary of Township 5, Range 26, is 3301 feet; and on north boundary of Township 8, Range 24, is 2944 feet; thus giving a fall of 1048 feet between the extreme points mentioned, about 77 miles; or an average fall of 13·6 feet per mile. The fall per mile decreases proportionally as the river advances northward (see below under "Hydrography").

The valley of the Belly River is wide, the winding course of the stream creating numerous flats, which afford good subjects for local irrigation. It is not deep, and the slopes of the sides are gentle, supplying many opportunities of conveying water to the bench-land.

The elevation of the St. Mary River on the south boundary of Township 1, Range 25, is 4103 feet; on the north boundary of Township 2, Range 24, is 3680 feet; on the north boundary of Township 4, Range 4, is 3435 feet; and on the east boundary of Township 6, Range 23, is 2969 feet; a fall of 1134 feet in about 78 miles, equal to an average of 14·5 feet per mile. The rate of fall per mile does not decrease proportionally, being less in the central section than on either side, (see below under "Hydrography").

Soon after reaching Township 4, Range 24, the St. Mary River flows in a deep narrow cañon with sides rising from 150 to 200 feet, or more, to prairie level.

Farther on, although the valley opens out somewhat, the sides are alternately very steeply sloping, or precipitous cut banks, while the course of the stream becomes extremely tortuous and flows at a still greater depth below prairie level. On this account it is most probable that water diverted to the reserve must be taken above the point where the river first enters the cañon mentioned.

Generally throughout the reserve the soil is of a fertile character, varying from rich, deep, black sandy loam to clay loam and clay, and in the northern portion gravelly clay and clay loam. It is suited to every kind of agricultural produce of which the climate will permit. Surely it would seem that the wily red man, in his selection of this most fertile spot between the rivers, had a prescience of what might be in the near future, and in all truth it can be said, "Yea, he hath a goodly heritage."

The space between the International Boundary and the reserve, is occupied, for the most part, by outlying foot-hills. It furnishes a valuable catchment area, which drains, on the north, to the Belly River by way of Mahmee (Fishing) Creek and Bullhorn Coulée and to the St. Mary River by Lee Creek; on the east to the St. Mary by Snake Creek (local name); and on the south to the St. Mary by Boundary Creek.

Among the hills are a number of fertile valleys of varying extent, all lying at an elevation of over 4000 feet above sea level. Noticeably may be mentioned that known as "Buffalo Flat," occupying the north-west corner of Township 2 and west half of Township 3 in Range 26; the valley along Mahmee Creek, extending over the south-west part of Township 2, Range 28; the valley along Boundary Creek in Township 1, Range 26; and that along Snake Creek in south-west corner of Township 2, Range 26. All these

valleys are probably susceptible of irrigation to a certain extent from local sources, chiefly dependent upon water-storage in the catchment area mentioned above.

Throughout the area are numerous scattered ponds and small lakes, that can be utilized as storage basins, and, in some cases can be connected with one another by channels cut between. They occur most frequently in the hills west of Buffalo Flat and east of Mahmee Creek. The initial branches of Bullhorn Coulee traverse the said flat and can probably be used to conduct water from some of these small basins to irrigable lands situated therein.

On the west side of the St. Mary River, a narrow strip of sloping bench-land extends northward through Township 1, between it and the hills, broadening in Township 2 to an undulating plain sloping to St. Mary River on the one hand and Lee Creek on the other and occupying all the north-eastern portion of that township. Taking the natural fall of the St. Mary River in this section into consideration, 22·3 feet per mile, there can be little doubt as to the possibility of conducting water to this plain; although it is certain that difficulty will be encountered in carrying it across the several drainage lines leading from the hills to the river, on account of the deep beds cut by them through the prairie surface.

Lee Creek receives its supply directly from the mountains by means of a number of branches heading therein, and at the same time drains a considerable catchment area, the one above referred to, on its way to the St. Mary River. It carries a large quantity of water in the spring and, if storage capacity can be found, will be a valuable factor for local irrigation. Such facilities for storage appear to exist not far from the village of Cardston, in section 26, Township 2, Range 26, West 4th Meridian, where the stream passes, for a short distance, through a narrow cañon, about 200 feet wide. It would seem possible by building a dam here to form a lake of considerable extent on the upper side. Unfortunately, however, it would have the effect of flooding out a number of settlers; although the maxim of "the greatest good to the greatest number" would probably be applicable here.

The valley of the creek is very fertile and presents a number of small flats, now under cultivation by Mormon settlers from Utah.

The creek itself has a very small flow during the summer months. By storing the spring water as indicated, or in a similar manner farther up the stream, the supply might be made constant for the irrigation season and would very likely be sufficient for the wants of all the flats in the valley, lying between the point of storage and the junction with the valley of the St. Mary River.

At present the Cardston Co-operative Company have a small ditch in operation, which takes water from the creek a short distance above the village and is used to run a small grist mill and water the gardens lying at a sufficiently low elevation.

It is not thought that the supply yielded by the creek would be available beyond its own immediate valley.

ST. MARY RIVER TO THE TOWNSHIP OUTLINE BETWEEN RANGES 22 AND 23, WEST OF 4TH MERIDIAN.

East of the St. Mary River, levels were carried along the south boundary of Township 1 (International Boundary) across Ranges 25, 24 and 23, West 4th Meridian.

From the river, the surface rises along the boundary to a maximum elevation, in section 1, Range 2, of 4636 feet above sea level; or 533 feet above the bed of the stream. It is, however, the north end of a spur of hills, extending not more than a mile into Township 1.

Continuing easterly, the ground falls from the elevation above quoted to the valley of Rolph Creek. The bed of the creek lies at an elevation of 4106 feet where crossed by the line of levels in section 5, Township 1, Range 24. It is an unimportant stream, not constant in flow, having its rise a mile or two south of the Boundary Line. Nevertheless, in the spring, it must carry a considerable quantity of water, the run-off from the surrounding hills.

It could probably be dammed, at slight cost, in the south-west quarter of section 15, Township 1, Range 24, and sufficient water stored to furnish local irrigation farther

down. This, however, could not be done without detriment to settlers using, for hay crops, the bottom lands that would be flooded.

Westmary and Eastmary Lakes, two small bodies of water, situated near the south boundary of Township 1, at the base of the hilly spur alluded to, receive their supply from the catchment area of the hills. They can be diverted to increase the volume of Rolph Creek, the highest elevation in the valley between the two, not exceeding 35 feet, and the distance little over a mile. When measured in September last, the greatest depth was 4 feet and the joint surface area about 275 acres. The water is alkaline.

Easterly from Rolph Creek the surface, rising to the Milk River Ridge, attains an elevation of 4588 feet when it falls sharply to the north branch of the Milk River in section 3, Township 1, Range 23, at 4121 feet above sea level. The descent is cut by deep narrow coulees or, more properly, gullies draining to the river. The bed of the stream is situated 140 feet below the escarpments of the valley, which here has a width of less than half a mile, from bank to bank.

East of the river the surface again rises to an elevation of 4607 feet at the south-east corner of Township 1, Range 23, west 4th Meridian; within a few feet, the greatest elevation of this portion of the ridge.

Levels were carried no farther east along the International Boundary.

From the south-east corner of Township 1, Range 23, a line was projected north with the transit, approximately along the outline between Ranges 22 and 23 (the Dominion Lands survey not extending to this section of country) and levels taken along the same.

In a northerly direction the surface again falls sharply to the valley of the north branch of Milk River in a rough and broken descent, cut by numerous drainage lines. The more elevated portion of the ridge lies to the east.

Where crossed by the outline in section 25, Range 23, the bed of the river, lying 120 feet below the bench land, has an elevation of 4029 feet and the width of its valley is about 30 chains.

Continuing northerly the elevated portion of the ridge is again reached on the east boundary of section 36, Township 1, at 4427 feet, and from here on, gradually rises to 4518 feet at the north-east corner of the same section. From this point north, along the east boundaries of sections 1, 12 and 13, Township 2, Range 33, the mesa-like portion of the ridge, crossed by the line of levels, is met with. The land then falls along the outline to the bed of a lake in sections 29 and 30, Township 2, Range 22. The lake referred to is situated in a valley traversing the centre of this portion of the ridge, in a north easterly direction, towards the headwaters of Pothole Creek. The elevation of water surface, in September last, was 4270 feet; the greatest depth, 15 feet; and the superficial area about 400 acres. It appears to be one of several lying in the same valley, both at a greater and less elevation. In all likelihood its waters can be conducted to one of the lakes in the same valley, at a lower elevation, and subsequently to one of the branches of Pothole Creek.

On the opposite side of the valley the surface rises to 4471 feet near the north boundary of Township 2, and from this point on, the drainage is northerly to Pothole Creek and St. Mary River.

The north escarpment of the ridge is crossed by the east boundary of section 25, Township 3, Range 23, at an elevation of 4161 feet: from which point the land falls generally, north to the St. Mary River and east to Pothole Creek.

The tract of country known as the Milk River Ridge, is a broken and hilly area, cut in two by the valley of the north branch of Milk River. On the south side it reaches an elevation of a little over 4600 feet above sea level, and on the north side of about 4550 feet. The bulk of the ridge is on the north, and consists of mesas and rounded hills, cut by innumerable ravines and coulees, reaching to a depth of from 50 to 120 feet below the prairie surface and trending, south of the valley in which the lake above referred to is situated, chiefly in a south easterly direction to the valley of Milk River (north branch), which drains the entire central portion of this catchment area. North of the same valley, the ravines and coulees trend, for the most part, north-easterly to Pothole Creek. At the same time, however, a considerable run-off is carried to the St. Mary River by way of Pinepound Creek.

Numerous flowing springs are met with in the valley of the north branch of Milk River, and in the ravines and coulees leading to the same. The majority lie in deep narrow coulees and are of no irrigable value, except as adjuncts to the volume of Milk River. Springs, also, appear throughout other parts of the ridge, but not with such frequency.

Of the south and east portions of the ridge, but little can be said at present, beyond the fact that it extends easterly some two miles or so into Range 17. No work has yet been done in this direction by the Irrigation Survey. The subdivision of Townships 3 and 4 in Range 20, West 4th Meridian, under the Dominion Lands Surveys, bears out the statements already made, viz. : That the ridge is very much broken by hills and ravines, and that the bulk of its area drains southerly to the north branch of Milk River.

West of the outline between Ranges 22 and 23, the ridge and immediately adjacent hilly country occupies almost the whole of Townships 1, 2 and 3 in Range 23, extending northerly into the south east corner of Township 4, same range, and westerly a short distance into Townships 2 and 3, Range 24.

It is much doubted if this ridge will prove of great value as a catchment area; or that the run-off represents a very large quantity of water.

That a good deal passes down the valley of Pothole Creek, is certain. It is equally certain that the largest portion goes to the north branch of Milk River. At the same time, the said branch does not show indications of carrying nearly as much water, at the flood stage, as would be expected under the circumstances.

The north branch of Milk River, in so far as it came within the ken of the Division, during the past season, is not a very weighty factor in the matter of irrigation in Canada. So far as it was observed, it is only applicable to local irrigation in its own valley; and as the valley but little exceeds half a mile in width, this would be on a small scale. Even if it were possible to conduct water from it to the greater altitude of the slopes above, the very numerous ravines and coulees leading from the higher elevations of the ridge would render it a difficult and costly undertaking.

Between the St. Mary River and the Milk River Ridge the surface is of a somewhat varied character. In Townships 1, Ranges 24 and 25 it is decidedly lumpy, with the exception of a strip of rolling land about two miles in width, immediately adjoining the valley of the river; Township 2, Range 24, south-east and eastern portions lumpy; balance rolling; Townships 3, Ranges 24 and 25, rolling with a number of hay flats, the dry beds of ponds and small lakes; Townships 4, Ranges 24 and 25, long sweeping rolls, rising in elevation towards the St. Mary.

The height of land here lies close to the valley of the river, and generally the land falls gently north and east to the valley of Pothole Creek. The lumpy country referred to may be regarded as the outlying flanks of the Milk River Ridge. Scattered throughout this section, are numerous beds of ponds and small lakes (many of which are now dry) that may be made to serve as small storage basins for water diverted from the St. Mary River by any general scheme of irrigation.

As previously shown the elevation of low water surface of the St. Mary on the south boundary of Township 1, Range 25, (International Boundary) is 4103 feet; and on the north boundary of Township 2, Range 24, 3680 feet; giving an average fall of about 22·3 feet per mile. At the former point the difference in elevation between the prairie level and the bed of the river, is about 120 feet; at the latter, about 150 feet. Taking into consideration the fact that, between the points mentioned, the slopes of the valley on the east, as well as on the west sides of the stream, afford facilities for conducting the water to the bench-land above, it will be seen that water may be readily diverted for application to the tract under discussion. The most suitable point for such a diversion, or that required for any large general scheme applying to irrigable lands north of the Milk River Ridge and south and east of the town of Lethbridge, is a matter for special survey; at the sametime, it is thought that it is between the two points mentioned, or possibly one a few miles farther north, that water so diverted will most advantageously be brought to the prairie level; chiefly for the reason that shortly below the last mentioned point the bed of the stream flows in a deep cañon, that would offer an effectual bar to any such project.

On the township outline, between Ranges 22 and 23, the land falls from the north escarpment of the Milk River Ridge to a lowest elevation of 3394 feet, at a point 14 chains north of the north-east corner of Township 4, Range 23.

From this point the surface rises northerly to an elevation of 3640 feet on the ridge occupying the largest part of fractional Township 5, Range 23, and extending easterly about two miles into Range 22. This ridge lies close above the St. Mary River and reaches northerly at a lower elevation to near the east boundary of Township 6, Range 23. From its crest the land descends in long rolling slopes easterly to the Pothole Creek ; while the slope to the valley of the St. Mary River is short, sharp and broken by coulées and gullies.

It is most likely that water diverted from the St. Mary will, after crossing Pinepound Creek, be conducted along the south and east slopes of this ridge for application to the gently rolling land between the St. Mary River and Pothole Creek.

For irrigable lands, situated on the slopes immediately north of the Milk River Ridge and west of Pothole Creek, a branch canal would probably be carried as high up as possible on the northerly slope of the said ridge.

NORTH OF MILK RIVER RIDGE AND EAST OF TOWNSHIP OUTLINE, BETWEEN RANGES 22 AND 23, WEST OF 4TH MERIDIAN.

But little work was done in this section during the past season. It consisted chiefly in carrying levels along the 2nd base line, between Townships 4 and 5, from the outline between Ranges 22 and 23, easterly to connect with the Alberta Railway and Coal Company's road to Great Falls ; also along the 3rd base line, between Townships 8 and 9, from the same outline, easterly through the town of Lethbridge, to again connect with the said railroad.

The elevation at the north-east corner of Township 4, Range 23, west 4th Meridian, is 3406 feet. Easterly, along the 2nd base line, the ground remains nearly level to the edge of the valley of Pothole Creek, the bed of which is situated about 100 feet below prairie surface, at an elevation of 3280 feet.

Pothole Creek has its origin in the northerly slopes of the Milk River Ridge. It is partly spring fed, receiving the remainder of its supply from run-off. The supply, however, is not sufficient to maintain a constant flow throughout the year. A few miles south of the base line the main stream is split into a number of branches, draining from different parts of the ridge. The valleys of the main stream and branches here afford many facilities for water storage ; and, as undoubtedly the spring flow represents a large quantity of water, it is thought that a considerable portion can be stored.

Continuing easterly from Pothole Creek, the base line passes over the northerly flank of the Milk River Ridge, attaining a greatest elevation of 3681 feet at a point 46 chains east of the north-east corner of section 35, Township 4, Range 21 ; and remaining at a slightly lower elevation until the north-east corner of section 32, Township 4, Range 20, is reached. From this point (elevation 3642) there is a general steady fall easterly along the base line to the valley in which the Alberta Railway and Coal Company's road is located. The elevation of the bench-land, above the said valley, is 3288 feet, and of the railway line in the bottom of the valley 3179 feet.

The north flank of Milk River Ridge is cut by numberless ravines and coulees, draining to the north and east. They vary in depth from 30 to 100 feet, and all carry more or less water during the period of spring flow. What quantity of water they carry, where it goes to, and whether it can be stored for later use, are matters for investigation during the time at which such flow takes place.

The westerly portion of the north slopes of the ridge drains to the St. Mary River by way of Pinepound and Pothole Creeks ; but, beyond the fact that the run-off from the easterly portion of the said slopes goes east, nothing for certain is known. Most probably it passes around the east end of the ridge and goes south to the Milk River.

The ridge here rises to an elevation of about 4300 feet, its north escarpment being situated some four miles south of the base line. The north flank, above referred to,

extends north of the base line to about the centre of Townships 5, Ranges 20 and 21. In Range 19 the base line is not far from its boundary, and farther east it gradually recedes towards the south.

Beyond, to the north, between the Belly and St. Mary Rivers and the Alberta Railway and Coal Company's railway, lies a gently rolling and undulating plain; the soil being composed, for the most part, of a fertile clay loam. The great bulk of this section, and country of similar character east of the railway, is susceptible of irrigation from the St. Mary River; and, with proper application of water, will furnish one of the finest agricultural centres of the entire district.

All the land included within the limits mentioned is at a lower elevation than that passed over by the 2nd base line.

It is highly probable that water applied to this section from the St. Mary River, will be diverted in the locality previously referred to; and having been conducted across the valley of the Pothole Creek, will be carried along the north flank of the Milk River Ridge, distributing north and east from that position.

The dry bed of a small lake, situated in the south-west corner of Township 5, Range 19 at an elevation of 3320 feet can be utilized as a reservoir site, and water conducted from this basin, east and south, by way of a valley running parallel to the north boundaries of Townships 4, Ranges 19 and 18, about half a mile therefrom, until it joins the valley through which the railway is located, at an elevation of about 3170 feet.

There is no doubt a number of small storage basins can be obtained throughout this section by utilizing depressions in which water-courses draining from the Milk River Ridge are situated; and further, that many of these same water-courses, which as they recede from the slopes of the ridge lie in more shallow valleys, better described as coulees than ravines, can be utilized as mediums for distribution to the north and east.

It is not thought that the valley of the Pothole Creek will offer any serious obstacle to the crossing of the main canal. At the most probable location for the crossing, not far from the 2nd base in Township 5, Range 22, the valley is not much over 60 feet in depth, with a width of from 20 to 25 chains (about a quarter of a mile).

The elevation of the Belly River where crossed by 3rd base line, between Townships 8 and 9, Range 24, is 2944 feet; where crossed by the same line in Range 23, 2758 feet; and in Range 22, 2663 feet. This is equal to a fall of 281 feet in about 47 miles, or an average of six feet per mile. At the first point mentioned, the bed of the river is less than 100 feet below the prairie surface, at the second point 250 feet, and at the third 270 feet to 300 feet below. Moreover, soon after the river is joined by the Oldman in Range 23, the sides of the valley become very steep and in many places are sheer clay cut banks. From the foregoing it will be seen that the chances of bringing water from the Belly River to the prairie surface between the points mentioned are not encouraging. Access, also, is cut off on the north by the valley of the Oldman River and on the south by that of the St. Mary. Consequently, irrigable slopes on the north side of the Belly River, will be compelled to look to the Oldman River for water supply; if, indeed it be possible to convey water from that stream to prairie level between the mouth of Willow Creek and its own junction with the Belly River.

Along the 3rd base in Range 22, from Belly River to Belly River, the general elevation ranges from 2970 feet to 3030 feet; and in Range 21 east of the Belly River from 2930 feet to 2980 feet—a slight general fall towards the river.

Here, in the vicinity of the town of Lethbridge, and to the east and south, the surface is a gently undulating open prairie, well suited to irrigation; and it is to this portion of the district that the waters of the St. Mary River can be applied most effectively.

The elevation of the St. Mary River at the International Boundary is 4103 feet above sea level; on the north boundary of Township 2, 3680 feet; and on the north boundary of Township 4, 3435 feet. It is altogether likely that between these points, the intake of a canal, to serve the area described, will occur. As the elevation at Lethbridge is about 2950 feet, there is over 700 feet of a fall to convey water from the central point mentioned on the St. Mary River to lands in the vicinity of the said town.

GENERAL REMARKS.

From the Little Bow River, southerly, all the streams mentioned above, with the exception of the north branch of Milk River, are situated in the drainage basin of the Belly River and are either directly or indirectly tributary to the same.

All, excepting the Little Bow, which is fed by under-flow from Highwood River, receive their supply from natural storage and precipitation in the eastern slope of the Rocky Mountains.

First in importance is the St. Mary, and then the Oldman River. Although the latter conveys a larger quantity of water than the former, its position and character do not constitute it nearly so valuable a factor to irrigation. In the matter of volume, the Waterton River comes next. This stream, however, from its position, is of small value directly as applicable to irrigable areas; but is a valuable adjunct to the volume of the Belly River.

Willow Creek, a tributary of the Oldman River, is a constantly flowing stream of some importance to irrigation.

Lee Creek, a tributary of the St. Mary and Pincer Creek of the Oldman River are about of equal value.

Mosquito Creek flowing to the Little Bow River, Mahmee Creek to the Waterton, and Rolph, Pothole and Pinepound Creeks to the St. Mary are only of value in so far as their spring flow can be stored for use at a later date.

The Milk River and its branches have their sources in Montana Territory; from whence they pass into Alberta District. Here the main stream traverses some 120 miles in an easterly direction and then returns to Montana as a tributary of the Missouri River.

Generally, the soil throughout the above described tract, is of a most fertile nature; for though patches occur, where sand, gravel and alkali are apparent, these places are few and far between and are lost sight of in the wide stretches of rich clay and clay loam soil met with on the levels; and the alluvial deposits of deep black sandy loam lying in the valleys and along the slopes. None can be classed as barren lands, and there is little doubt that the proper application of water will show it to be capable of producing with the best.

Until the foot-hills are reached, timber is only encountered in the river bottoms; and even there, with the exception of the flats along the Belly and Oldman Rivers, in quantities that are scarcely worth the mention.

In the case of the two streams referred to, poplar, cottonwood and willow are the chief varieties.

HYDROGRAPHY.

The investigations carried on by Division B under the above heading were altogether of a preliminary nature. The principal objects in view for the season of 1894 were as follows:—

1. To obtain some general knowledge of the entire water supply yielded by the catchment and natural storage area of the eastern slope of the Rocky Mountains, within the limits of the tract of country covered by the operations of the division.
2. To find the relative volume of the principal water-ways conducting this supply to lower levels and their respective value in application to irrigable areas.
3. To ascertain the location and volume of existing lakes and other bodies of still water; also the capacity and position of basins suitable for reservoir sites.
4. To locate the origin and measure the discharge of springs.

GENERAL KNOWLEDGE OF WATER SUPPLY.

In order to obtain a general knowledge of the amount of water yielded by run-off from the mountains, the result of precipitation, and over-flow from natural bodies of water stored within their recesses, measurements of discharge of all rivers and streams of any importance, were taken where crossed by main lines of levels.

Streams and water-ways were measured in the order in which they were arrived at in conducting over the country the network of levels previously described.

By this means they were measured, in the first instance, soon after their exit from the foot-hill country and while they were little more than rapid mountain streams or branches, contributing to form rivers, but scarcely yet having arrived at that dignity. Again they were measured below each junction of importance, and so on easterly, as far as operations were carried.

Thus, it will be seen that the several measurements furnished independent checks and methods of comparison with one another, and at the same time an approximate estimate of the run-off contributed to each main stream, and so of the entire supply.

RELATIVE VOLUME AND VALUE OF STREAMS.

In order to ascertain the volume of streams, cross-sections of their beds were taken for actual water area and the most probable high-water and flood areas. In addition, in the first case, measurements were made with a current meter of the rate of flow and the results applied to the area of the water section in order to obtain the discharge at the time such measurements were made.

The programme observed was as follows :—

1. For flowing streams.

A suitable point was first selected, where the banks were fairly uniform and the flow regular ; care being taken to avoid, as far as possible, shoals, rapids, rocks, cross-currents and eddies in the vicinity of the line of cross-section.

A steel wire, marked in ten-foot lengths by small brass shoulders, was next stretched taut from bank to bank, at right angles to the course of the stream. It may be here observed that in many cases, especially streams subject to wide differences of flow, the bed at low-water stages is not parallel to that at high-water and flood, but travels diagonally from bank to bank of the high-water bed, leaving on either side projecting sand or gravel bars, covered during the higher stages. In instances of this kind, separate cross-sections were taken, suitable to the stage of water for which the flow was being measured.

The wire having been properly stretched, a plumb-bob was suspended from it over each edge of the water-section, to mark the initial and closing points of same upon the wire.

Soundings were then taken at ten-foot intervals, as marked by the brass shoulders, or closer if the inequalities of the bottom surface demanded it. The soundings were made with a twelve-foot rod, in two lengths, marked to feet and tenths ; having attached to the bottom end an iron disc, three inches in diameter, to prevent the rod sinking in mud or sand.

Current meter readings were next taken midway between each two soundings. The meter vanes, attached to the axis of revolution, were allowed to revolve during stated intervals of time, generally thirty seconds to two minutes, according to the rapidity of the current. The time was measured by a stop-watch, great care being taken to make the starting and stopping of the watch identical with the movement by which the meter is thrown in and out of gear.

By these means the entire cross-section was divided into subsections, for each of which, the mean rate of flow or velocity of current was obtained ; and, by applying these mean velocities to their respective areas, the actual discharge for each subsection. The sum of the discharges then gave the discharge for the whole cross-section in cubic feet per second (second-feet), within such limits of accuracy as can be obtained by this method.

The "Lallie" meter was used and found to give excellent results for slow and medium velocities, but the mechanism is somewhat light and the meter difficult to handle in high velocities.

In using the meter, the observer first noted the register of the dials, which was duly entered by the recorder on a specially prepared form. At the close of the observation, the dials were again read and recorded, the difference between the readings being the number of revolutions.

In streams of low velocity the meter was passed slowly from surface to bottom and back, at as nearly a uniform rate of speed as possible, and the time occupied and the number of revolutions noted. This observation was then checked by one taken at mid-depth for a stated interval of time.

In streams of high velocity, two observations at mid-depth were taken, the time intervals being different; thus furnishing checks upon one another.

When the water was sufficiently shallow, soundings and meter readings were obtained by the observer wading into the stream. In other cases a portable canvas boat was used, the *modus operandi* being as follows:—A strong, light Hudson's Bay cod-line was stretched across the stream, some fifteen to twenty feet above the sounding wire, and, if possible, at a greater elevation. On this was placed a running double block, to which the boat was attached by a line passing through it to a second block fastened to the bow; thus enabling the observer to maintain his position immediately beneath the wire. By means of lines from the first block to either shore, the boat could be drawn swiftly and easily to any point desired in the cross-section.

In calm weather the method described was found to work admirably. In three separate cases the Belly River, with a width of three hundred feet and a depth varying from two to fourteen feet, was thus measured in less than four hours, including the stretching of the wire and arrangement of the other gear

Three men may be placed in the boat, an observer, a time-keeper and a recorder; although two can take the necessary observations by combining the duties of observer and time keeper. No manipulation of the boat is required by those in it, beyond drawing up or lowering down the stream to keep it under the wire, and perhaps a slight use of a paddle to hold it steady in a swift current. All transverse motion is obtained by instructions to men holding the lines from the running block to either bank.

The wire measurement was finally checked by a carefully measured triangle laid down by the transit.

For high-water and flood cross-section, the spirit level and rod were used, and the water-marks at these stages established, on both sides of the stream, from the best evidence obtainable.

They were then connected by measurement and levels with the extreme points of the water cross-section, previously taken, where both lay in the same straight line; thus, furnishing sufficient data to enable a plot to be made for the computation of the area. If not in the same straight line, it became necessary to take a complete separate cross-section for the high-water and flood discharges.

Levels were carried a sufficient distance up and down the stream to find as nearly as possible the slope of the water-surface at the point of cross-section; and thus, approximately, the slope at high-water and flood stages.

A value was assigned to the factor of roughness (n), in accordance with rules laid down by Kutter; and data was at hand to make a computation of the high-water and flood discharges by means of Kutter's formula.

Of the results obtained, actual flow, by means of meter-measurement for velocity, is the only one better than a mere approximation; and even that only holds good for the date at which the observation was made.

It is well known that the only really accurate method for measuring the discharge of streams and rivers, is—in the case of the former—by building weirs, over which the flow, for any given height of water, can be readily computed; and by keeping a daily record of the rise and fall, by means of gauges made for that purpose. In the case of the latter, daily records of rise and fall and frequent meter-measurements for velocity in a given cross-section are necessary, the observations extending over a number of years.

In the application of Kutter's formula to the observations taken by the Division, the uncertain quantities are the location of the high and flood-water marks, the factor of roughness (n), and to some extent the sine of the slope (s).

The results obtained are good for actual discharges, and fair for high-water and flood discharges; as shown by comparison of the results at different points on the same stream; or of the volume of two or more streams as compared with that below their junction. (See schedule of discharges, general report.)

The " Acme " folding canvas boat was used and deserves a word or two in its praise. It is strong, light, easily managed and so portable that it can be rolled up in a bundle, four feet long by ten inches in diameter and carried on the back of a buckboard, in a cart or even on a man's shoulder with very little inconvenience. It will accommodate three or four men ; can be put together and taken apart in from ten to fifteen minutes ; and only demands that the canvas be put away dry, when not in use.

2. For beds of streams not flowing.

In cases of this kind the methods were similar to those employed for high water and flood discharges, with one exception, viz., : that in obtaining the slope for fall of water-surface, the dry bed of the stream was used instead of the water surface of the actual flow.

The relative value of streams for purposes of application to irrigable areas are dependent upon a number of conditions, of which the following are the principal.

The amount of water discharged at highest and lowest stages.

The fall or grade of the bed of the stream.

The nature of the channel or channels in which it flows ; whether tortuous or straight ; single or split into branches.

The character of the valley in which the bed lies, and the facilities afforded by it for conducting water to the area to which it is to be applied.

The soil and other matter composing the bed and valley of the stream.

The amount of sediment carried, and quality of the same as a fertilizer.

The amount of detritus brought down at high-water and flood stages.

For information concerning the above, see subjoined notes under the names of the respective streams that have been measured for discharge.

VOLUME OF LAKES, AND OTHER BODIES OF STILL WATER.

The only bodies of still water met with by the Division consisted of a few small unimportant lakes and a number of ponds.

A traverse was first made to ascertain the superficial content of the water area and such traverse connected with the lines of the Dominion Lands Survey.

A sufficient number of cross-sections were then taken to obtain an estimate of the cubic content or volume ; the cross-sections being referred to known points in the traverse.

Soundings were made with the rod or a sounding line at even intervals, measured by time or estimation, and subsequently corrected when the exact length of each cross-section was known from the plot of the traverse. This method gives a sufficiently close approximation for the general purposes of the survey.

CAPACITY AND POSITION OF BASINS SUITABLE FOR RESERVOIR SITES.

But little was done in this direction ; chiefly, for the reason that the general character of the country embraced by its operations is not suited to reservoir sites or storage basins of large capacity and extent.

Most of the rivers and streams were encountered at a considerable distance from their heads ; at points, where their volume was too great and the valleys in which they flow too wide to furnish advantageous opportunities for building dams to withstand the flood stages of water.

Some few, however, may be mentioned as exceptions ; noticeably, Pincer Creek, Lee Creek, Pothole Creek and Bullhorn Coulee. A number of other watercourses draining catchment areas, such as ; the Porcupine Hills, the Ridge between the Rivers, the hilly country south of Lee Creek, the Milk River Ridge and the foot-hills generally may be made to do good service in this direction. It will, however, be first necessary that a more definite knowledge be obtained of the amount of water they carry at flood stages, by actual investigation and measurement during the period of spring flow, when these channels are the mediums by which the run-off from their

several catchment areas is conducted to main streams draining the basins in which they are situated.

A few small reservoir sites were located, among which the following may be referred to:

Township 22, Range 2, West 5th Meridian.—Dry bed of Red Deer Lake. Source of supply: Elbow River.

Townships 18, Ranges 1 and 2, West 5th Meridian.—Dry basin. Source of supply: north branch of Highwood River.

Townships 16 and 17, Range 28, West 4th Meridian.—Dry bed of lake. Source of supply: Highwood River.

Township 16, Range 26, West 4th Meridian.—Dry basin. Source of supply: Highwood River.

Townships 13 and 14, Ranges 25 and 26, West 4th Meridian.—Dry bed of lake. Source of supply: Highwood River.

Township 2, Range 25, West 4th Meridian.—Small lake. Source of supply: Snake Creek.

Township 2, Range 22, West 4th Meridian.—Lake. Source of supply: catchment area.

Township 5, Range 19, West 4th Meridian.—Dry bed of lake. Source of supply: St. Mary River.

The superficial area and location of the above were ascertained by traverse, and the approximate capacity by the use of spirit level and rod, and by aneroid barometer readings.

The mountain and foot-hill region must be looked to for storage basins and reservoir sites of large capacity; where the streams are as yet branches, contributing to form rivers, and have not obtained the force at flood stages produced by their union farther on; where their beds lie in valleys enclosed by high hills, which, frequently coming together, provide opportunities for building dams; and where depressions surrounded by high walls furnish the necessary requirements to retain supplies of water that may be conducted to them from adjacent sources.

The phototopographical methods of survey, which it is proposed to apply to this section of country, will undoubtedly furnish full information of its capabilities in this respect.

DISCHARGE OF SPRINGS.

The origin of all springs and spring creeks was located and flow measured.

For this purpose a dam was built at a suitable point near the origin, selected so as to confine the entire flow. A trough was then fitted to the dam and, so soon as the flow became constant, it was measured by means of a stop watch and pail, the cubic content of the latter being known. A schedule of results, reduced to gallons per minute, is attached to the general report.

The observations give results that are only true for the time and date at which they were taken. As the discharge varies through different seasons of the year, and even, it is claimed, has a distinct diurnal variation, it follows that to obtain an accurate knowledge of flow from this source, a series of observations are necessary; entailing a cost that, in most cases, would not be compensated by the value of the results as applicable to practical irrigation.

A far more practical and, indeed, vital fact, in connection with the water supply from spring sources, is, that in the portion of Southern Alberta, known as the "Ranching District," the flow from the springs has been very much curtailed by cattle and horses tramping in and around them. In some instances, the flow is completely stopped, and in others what was at one time a flowing spring is now a mere trickle.

During the past season it was noticed, that where auger holes were bored at the spring head, and free access given from the gravel strata through which the sub-surface water flowed, the discharge was increased three-fold.

Independently of the bearing such action might have upon the irrigation question, the small amount of labour required on the part of the ranchman or settler, to clear out

and fence many of the now nearly stamped-out springs, would go far to alleviate a growing evil; by giving cattle and horses opportunities to obtain water without being obliged to travel long distances from their pasturing grounds.

NOTES ON RIVERS AND STREAMS OF WHICH THE DISCHARGE WAS MEASURED.

The rivers and streams referred to below are placed in the order in which they were met with by Division B while conducting the season's operations.

The Elbow River, Fish Creek, Sheep River, Highwood River and branches, and the Little Bow River were also measured when encountered by Division B, but as they are situated within the area more particularly covered by the operations of Division A, and are fully dealt with in the report of that Division, they are not here referred to.

PINE CREEK.

Is a small stream heading in the south-west quarter of Township 22, Range 2, west 5th Meridian.

The supply is received from spring sources in the locality named, augmented by flow from numerous springs along the creek valley. It is further supplemented during the early spring by the run-off from the hills situated to the north and south in Townships 21 and 22, Range 2.

The flow is not constant, and is further curtailed by settlers in the valley building dams to flood the bottom-land for the purpose of raising hay crops.

The bed of the stream, resembling a trough in structure, winds along the bottom of a valley from half a mile to a mile wide. The sides of this valley are gentle slopes, particularly so on the north, becoming wider apart and the valley more shallow as the Bow River, of which the stream is a tributary, is approached.

The soil is very fertile, presenting a rich deep loam over a stiff clay.

As an irrigation factor the stream is of no value; but this is of little consequence, for the reason that the entire valley can be served from the Elbow River by means of the Calgary Irrigation Company's system. At the present time the northerly slopes are provided for by this system, the dry bed of Red Deer Lake in sections 13 and 14, Township 22, Range 2, immediately above the valley, having been selected as a reservoir site, to retain water for this purpose.

The amount of water carried during high water flow will be found on the accompanying discharge sheet.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Pine Creek.

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
June 28.	Sec. 6, Tp. 22, Rge. 1, west 5th Meridian.	.....	27·0	.....	Creek not flowing.

MOSQUITO CREEK.

This stream is formed by the union, in Township 16, Range 28, west of 4th Meridian, of a number of branches heading in the northerly slopes of the Porcupine Hills. Its course is south-easterly, joining the Little Bow River near the east boundary of Township 15, Range 26

The supply, chiefly the result of precipitation, is slightly augmented by the discharge of springs, situated along the valleys of the several branches. As a consequence, the creek flows only during the early spring, and for the balance of the year the water either lies in stagnant pools or dries up entirely.

In the spring, however, a quantity of water is carried; and it is likely that a considerable portion can be stored either in the hills or by building dams along the course of the stream at points where it flows in a narrow valley, as in Township 15, Range 26.

The upper part of the bed and that of the north branch in Townships 16, Ranges 28 and 29 will probably prove useful as a channel for the diversion of water from Highwood River to the section of country lying south of the creek.

Soon after entering Township 15, Range 27, the valley becomes deep, with rugged clay sides, broken by cut-banks, which continue with slight difference to its junction with the Little Bow valley.

Within a few miles of this point, it broadens out to a width of about half a mile, presenting small flats that may be irrigated by water stored as above indicated.

The bed of the stream is composed of a light whitish clay, grown with weeds, and is very stony. The flats near its mouth are of a similar clay with a shallow covering of gravelly loam.

The elevation of the north branch (bed of stream) on the north boundary of section 31, Township 16, Range 29, is 3494 feet; of same branch on north boundary of section 35 in same township, 3345 feet; distance about 10 miles; fall 15 feet per mile; bed of creek 40 feet below prairie surface.

Elevation of main stream on east boundary of section 12, Township 16, Range 28, is 3265 feet; distance from point previously mentioned about 12 miles; fall 6·7 feet per mile; bed 40 feet below prairie surface.

Elevation on east boundary of section 12, Township 15, Range 26, is 3090 feet; distance from preceding point about 22 miles; fall 8 feet per mile, which probably continues to junction with the Little Bow River; bed 80 feet below prairie surface.

Cross-sections were taken at the last three points for approximate discharge; for results, see accompanying schedule.

The water left in pools during the summer is brackish and slightly alkaline.

There is no timber along the valley of the main stream. A little willow brush is found along the valleys of some of the branches.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Mosquito Creek.

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
July 20.	North boundary of Sec. 35, Tp. 16, Rge. 29, W. 5th Meridian.	.....	98·0	.....	Creek not flowing.
July 23.	East boundary of Sec. 12, Tp. 16, Rge. 28, W. 5th Meridian.	.....	216·0	1741·0	" " "
Aug. 1.	East boundary of Sec. 12, Tp. 15, Rge. 26, W. 5th Meridian.	.....	105·0	.....	" " "

WILLOW CREEK.

Willow Creek is a bright little stream, maintaining a constant flow throughout the year.

It heads primarily in the upper end of the Livingstone Range and is fed by drainage from the northerly and easterly slopes of the Porcupine Hills.

The stream leaves the hills in the north-east corner of Township 13, Range 28, W. 4th Meridian, not far from the mouth of Pine Coulee; and winds south easterly along a valley, about a quarter of a mile in width, for the greater part of its course; but widening to nearly a mile some little distance before joining the Oldman River in Township 9, Range 25.

The channel of the stream lies at a depth varying from 80 to 100 feet below the escarpments of its valley.

On leaving the hills, the creek receives no further supply from the east. On the west, however, a number of tributary streams add to its volume in the spring; Trout Creek and Muddypound Creek are the principal. They carry the run-off from the eastern slopes of the Porcupines to Oldman River by way of Willow Creek.

In the upper reaches, the bed of the stream is stony and its banks composed of clay and gravel. In the centre and southerly portions it has a tendency to be muddy, owing doubtless to the quantity of silt brought down at high water and to the lesser fall of the bed; also to the fact that it here cuts through a light sandy clay soil.

For application to irrigable slopes above the valley on the east, water will probably be most easily diverted close to the mouth of Pine Coulee. On the west, however, the valleys of the tributary streams mentioned and of several other water-courses, which join the creek in the same locality, will offer serious obstacles to the diversion of water at any point above their junction. Below Muddypound Creek, between the hills and Willow Creek, are rolling and undulating slopes that might possibly be irrigated. Flood-water does not appear to bring down a large amount of detritus.

It is very likely that the supply of the stream can be largely supplemented by storage of its water, or that of its branches, in the Porcupine Hills; on this point, nothing definite is known, the operations of the survey not having been extended so far west.

Below the hills, the sides of the valley of the stream are to a large extent cut-banks of light sandy clay, particularly on the east side. Small bottoms along this valley offer opportunities for local irrigation at little cost and difficulty. Some attempt has already been made in this direction by Messrs. Leeds and Elliott, who have partially constructed a ditch, heading near the north boundary of section 1, Township 13, Range 28, on the west side of the creek, but which is not yet completed.

There is no timber of any size, but plenty of willow brush along the creek.

The elevation of the stream opposite the mouth of Pine Coulee in Township 13, Range 28, is 3334 feet, and on the north boundary of Township 12, Range 28, 3260 feet; distance about 7.4 miles; average fall per mile 10 feet.

The elevation on east boundary of section 25, Township 9, Range 26, about two miles from junction with the Oldman River, is 3016 feet; distance from preceding point named, about 50 miles; average fall per mile, 4.9 feet.

Two cross-sections of the stream were taken. For discharge at these points see attached schedule.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Willow Creek.

Meter No. 25. Observer, A. O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
July 25.	Sec. 14, Tp. 13, Rge. 28 W. 4th Meridian.	25·8	581·0	.....	
Aug. 10.	Sec. 24, Tp. 9, Rge 26, W. 4th Meridian.	39·6	906·0	2504·0	

OLDMAN RIVER.

The Livingstone River or North Fork, the Crow's Nest River or Middle Fork and the South Fork of the Oldman River join together close to the east boundary of Township 7, Range 1, West 5th Meridian, to form the largest tributary of the Belly River. They have their rise, respectively, in the Livingstone Range, in the Crow's Nest Pass, and in the mountains south of that Pass. Combined they drain a very large and important catchment area.

In addition to the supply brought to the main stream by these three forks and their numerous branches, the Oldman River receives, on the north, the contents of Tennessee Creek, Olson Creek, Willow Creek—the last mentioned being the only one having a constant flow—and of numerous other small water-courses, contributing the entire run-off from the south and east slopes of the Porcupine Hills. On the south, Pincer Creek and Crowlodge Creek add their contribution; the former being much the more important of the two.

From the junction of the Forks, the course of the Oldman River is easterly to near the centre of the Peigan Indian reservation. It here turns north-easterly to the east boundary of Township 10, Range 25, West 4th Meridian; from which point it flows south-easterly, joining the Belly River at Fort Kipp, in Township 9, Range 23.

On the south bank of the stream is situated the town of Macleod, a distributing centre, the southern terminus of the Calgary and Edmonton Railway and the headquarters of the southern division of the North-west Mounted Police Force.

The valley of the main stream varies in width from half to one and a half miles. It presents fine alluvial bottoms, partially timbered with groves of poplar, cottonwood and thick willow brush.

These bottoms afford abundant opportunities for local irrigation, although a small ditch put in by Maunsell Bros. in Township 9, Range 27, West 4th Meridian, is all that is in force at the present time.

The sides of the valley are generally, in the portion lying west of Macleod, easy slopes with occasional cut-banks of light whitish clay. Many facilities may be found to conduct water to the lands lying above the valley of the stream, both on the north and south.

The principal areas to which irrigation from this source may be applied, are those lying east of Pincer Creek and north of the Ridge between the Rivers; also between the Oldman and Belly Rivers, north-east of the same ridge. To distribute water over these areas, it is believed that the river must be tapped above the junction of Pincer Creek, and the water so diverted flumed across that creek. For the extreme northerly portion between the two rivers named, water may be diverted, not far above the town of Macleod, without much difficulty. On the north side, for slopes lying between the Porcupine Hills, Oldman River and Willow Creek, it is likely water can be taken out below the junction of Olson Creek. East of Willow Creek, irrigable slopes lying north of the Belly River will look to the Oldman for their water supply, the bed of the Belly River lying far too low beneath the prairie level to attempt to bring water from it to the slopes referred to.

Generally speaking the valley of the river is not very deep, although in places cut-banks rise 100 to 150 feet above the stream.

The bed is wide, and, in general character, split into a number of channels, separated by bars and strips of gravel and sand, mixed with whitish clay, and grown in some cases with timber and willows. These bars are heaped in places with detritus brought down at flood stages. There is every evidence, that at such stages, a very large quantity of water pours like a torrent down the valley, spreading far and wide through timber and brush. Nor can it be wondered at, taking into consideration, the extent and nature of the catchment area from which the supply is received.

The actual flow early in August, was 1078 cubic feet per second. It will be readily seen, on examination of the maps accompanying the report of the survey, that this large supply will be but little diminished by the demands of the limited area to which it can be made do duty.

The bottom of the bed consists of stones and gravel; and, indeed, gravel underlies the entire valley bottom, covered to a greater or less depth by a deposit of fertile silt; notwithstanding which, the gravel crops out in many places. It is claimed that this gravel formation will prove a serious obstacle to local irrigation. Maunsell Bros. state that instead of being a detriment, the gravel strata here act as natural sub-surface distributors.

The water carries a very large amount of sediment, most of which, owing to the rapid fall—an average of over 9 feet per mile between Pincer Creek and Macleod, and nearly 7 feet per mile from there to the mouth—is deposited in the Belly River.

The elevation of the water surface in October last in S.E. ¼ of section 13, Township 7, Range 29, W. 4th Meridian, was 3352 feet above sea level; of the water surface on the east boundary of Township 9, Range 26, in August, 3024 feet; distance between these two points about 34 miles; average fall per mile 9.7 feet.

Again the elevation at the point of junction with the Belly River is about 2826 feet, and distance between it and the preceding point about 30 miles; the average fall therefore between the points named is about 6.6 feet per mile.

One measurement for discharge was made on the 9th of August, below the town of Macleod; for results see accompanying schedule.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Oldman River.

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water	Calculated discharge at flood level	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Aug. 9.	North boundary of Sec. 20, Tp. 9, Rge. 25, W. 4th Meridian.	1078	6383	14547	

PINCER CREEK.

Pincer Creek is a tributary of the Oldman River, joining it in section 7, Township 7, Range 28, West 4th Meridian. It rises in or close to Township 4, Range 1, West 5th Meridian, and flows from 30 to 40 miles north-easterly before joining the river.

The supply consists chiefly of run-off from the mountain region.

The flow is not altogether constant, ceasing during the driest part of the summer, but resuming after the occurrence of rains or snow in the fall.

It was measured on the 22nd of October last, at which time it was flowing, although shortly before it had been dry in places. For measured and computed discharge see below.

Indianfarm Creek, a channel for spring flow, joins Pincer Creek near the east boundary of Township 6, Range 30, West 4th Meridian.

Beyond the single measurement referred to, no investigations were made with regard to either of these streams or the valley in which they lie; consequently but little can be said, pending future surveys.

The point where the creek was measured is in the valley of the Oldman River, not far from its junction with that stream. In general character of the bed and banks, sand and gravel predominate, although in places the creek is sluggish and the bottom muddy and grown with weeds.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Pincer Creek.

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Oct. 22.	Sec. 7, Tp. 7, Rge. 28, West of 4th Meridian.	19·8	483·0	707·0	

WATERTON RIVER.

This stream ranks third in importance as a tributary of the Belly River. It is the direct outlet of a chain of lakes, known as the "Waterton Lakes," situated partly in Canada and partly in the United States, but mainly in the former. These lakes are natural storage basins, retaining the run-off from the catchment area of the Wilson Range of the Rocky Mountains.

The Waterton River is a swift and powerful stream, with a total length of 60 miles and an average fall of nearly 16 feet per mile.

Generally, its course is parallel to that of the Belly River, the distance between them never exceeding eight miles and gradually growing less as their confluence in Township 6, Range 25, West 4th Meridian is approached.

The stream flows in a deep, narrow valley, varying from a quarter to over a mile in width, and lies at a depth of from 80 to 150 feet below the escarpments of the same.

From the 1st correction line, between Townships 2 and 3, southerly towards the Waterton Lakes, the valley widens and becomes more shallow, while the grade of the bed is low, about 6 feet per mile. Northward the valley becomes narrower and the grade steeper, shortly assuming the nature of a cañon, with steep rugged sides, 100 to 150 feet deep. The river here cuts through a sandstone rock formation. The same character of valley prevails to near the east boundary of Township 5, Range 28, where the course of the stream is very tortuous, the velocity of the current having scooped deep horseshoe bends in the light sandy formation through which it flows. The sides of these bends, towards which the current sets, are perpendicular cut-banks of whitish sandy clay.

The bed of the stream is composed chiefly of gravel and rounded boulders, and the banks of sand and gravel in layers. The water is clear and cold and singularly free from sediment. A small amount of detritus comes down at flood.

In Townships 6, Ranges 25 and 26, the valley of the river presents a number of small bottoms on either side, well suited to the application of local irrigation; and every facility is afforded by the stream for this purpose. The valley here reaches to over a mile in width, the sides being formed in terraces, broken at intervals by cut-banks, which stand in many instances, some distance back from the present channel.

From the cañon-like character of the valley of the major part of the stream, and the rugged, rocky or perpendicular nature of the sides, it is much feared that great difficulty will be encountered—if indeed it be possible within remunerative limits—in conducting water to irrigable slopes immediately above the valley on both sides.

To the west and north, the surface is much broken by a number of tributary streams, draining from the foot-hills and the Ridge between the Rivers, among which may be mentioned the Middle and Drywood Forks of the Waterton River and Foothill and Backfat Creeks. These are not constant in flow, merely serving as run-off channels. Possibly, however, water may be conveyed to the slopes lying west of Belly River and east of the said Ridge.

For lands lying between the Waterton and Belly Rivers, it is thought that it will be a far easier matter to take water from the Belly River, somewhere near the south boundary of Township 4, Range 27, than from the Waterton.

In any case the area to which it can be made do duty is small. This is the more to be regretted, from the fact, that the river has a constant, steady flow throughout the year, discharging more water than the Belly above their confluence. However, even if it cannot be directly utilized to advantage in application to irrigable areas, it will serve well to replenish the supply of the Belly River, should water be diverted from that stream to serve the lands lying on the east and west.

Beyond a narrow fringe of small timber along the margin of the stream, chiefly cottonwood and willow, none of any account is found in the valley of the Waterton.

The elevation of the water-surface on the 4th September last at the south boundary of section 1, Township 3, Range 29, West 4th Meridian, was 4091 feet above sea level; of water-surface on east boundary of section 13, Township 6, Range 26, on 16th August, 3223 feet; distance between points named about 46 miles; average fall per mile 18·8 feet.

The elevation at the junction with the Belly River is about 3123 feet; distance from last point mentioned about 16 miles; average fall per mile 15·6 feet.

Thus: the average fall in total distance from Lakes to confluence, about 60 miles, is 16 feet per mile.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Waterton River.

Meter No. 25. Observer, A. O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water	Calculated discharge at flood level	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Aug. 16.	East boundary of Sec. 13, Tp. 6, Rge. 26, W. 4th Meridian.	611·9	5465·0	7854·0	
Sept. 4.	Intersection with the south boundary of Tp. 3, Rge 29, W. 4th Meridian.	501·9	4041·0	6820·0	

BELLY RIVER.

The parent stream of the Belly River Drainage Basin rises in Montana, about six miles south of the International Boundary Line. It is the outlet of two small lakes of the same name, situated south-west of Chief Mountain, in the Wilson Range of the Rocky Mountains. This supply is further augmented by run-off from the catchment area of these mountains.

The Belly receives as tributaries: on the west the Waterton and Oldman Rivers; from the north the Little Bow River; and from the south Mahmee Creek and the St. Mary River; together with a large number of smaller water-courses, which flow only in the early part of the summer.

From its source, the general direction of the stream is north-easterly to the confluence of the Oldman River in Township 9, Range 23, W. 4th Meridian. It here turns sharply to the south-east and so continues until it is joined by the St. Mary River in Township 8, Range 22. From this point, the course is northerly and easterly to the mouth of the Little Bow River, and from there is generally easterly to the confluence with the Bow River in Township 11, Range 13, W. 4th Meridian.

In connection with the tributaries named, it will be interesting to note; that the volume of the Waterton River is greater than that of the Belly above their junction, the former discharging 612 second-feet, and the latter but 442 second-feet, according to

measurements of actual flow taken in August, within two days of each other, at points only four miles apart. Again a little later, September 3rd and 4th, the Waterton was found to discharge 502 second-feet and the Belly 424 second-feet at points due east and west of each other, and six miles apart.

From the south boundary of Township 3, where the elevation of each stream has been accurately obtained, to their confluence, the distance traversed is very nearly the same; about 52 miles for the Belly and 53 miles for the Waterton; the average fall also, is almost identical, being in the distance mentioned about 18 feet per mile for the Waterton and 17 feet per mile for the Belly. It may be added that their courses are very nearly parallel at a distance of about six miles apart. Here, however, the similarity ends; the valley of the Waterton is deep cut, sharply defined, and, excepting a narrow fringe along the river, devoid of timber; with but few bottoms of small size. On the other hand, the valley of the Belly is here broad, defined by rolling slopes, and presenting numerous extensive bottoms, well timbered in places with groves of poplar, cottonwood and willows. The water of the Belly River is turbid, carrying a large amount of sediment, and the stream at high stages flows in a number of supplementary channels distributed through the bottom-lands; while the Waterton flows in a clear stream between well defined banks, over a stony bed, showing very few indications of silt.

In the case of the Oldman River, there is a much greater similarity; so great, in fact, that a doubt is raised as to which is really entitled to be called the parent stream. The chief points are as follows:—The measurements of the Oldman taken for discharge on the 9th of August, at north boundary of section 20, Township 9, Range 25, W. 4th Meridian gave for results: actual flow (measured), 1078 second-feet, high-water and flood (computed), respectively 6383 and 14547 second-feet; of the Belly River, near the north boundary of section 33, Township 8, Range 24, W. 4th Meridian, on 13th October; actual flow (measured), 1129 second-feet, high-water and flood (computed), respectively 6697 and 10862 second-feet.

These seem to indicate that the mean flow of the Belly is greater, while the Oldman River discharges considerably more at flood stages.

For 59 miles up the Belly from their confluence the total fall is 475 feet; equal to an average of 8·1 feet per mile. For 64 miles up the Oldman River, the fall is 526 feet; equal to 8·2 feet per mile.

The valleys of both are very similar in formation, varying from half a mile in width in the upper portions to over a mile near the confluence. They are defined by rolling slopes with occasional cut-banks, and range in depth from 30 to 150 feet at irregular intervals. Each valley presents extensive, partially timbered, bottoms, well suited to the application of local irrigation.

It will, moreover, be observed that at the point of confluence, the course of the Belly River, changes in direction to that of the Oldman.

Both streams bring down a large amount of detritus at flood stages, as shown by the piles of roots, trees, brush and other debris stranded on the bars, and washed high and dry along the banks. This material is torn from the wooded margins, when the streams spread far beyond their natural bounds. At high-water they flow through a number of supplementary channels that traverse their respective bottom-lands.

Of all the tributaries of the Belly River, the St. Mary is the most important from an irrigation point of view. Its features, however, are totally distinct from those of the Belly.

On the other hand, the Little Bow River is of slight importance; although, at one time, judging from the size and depth of the valley through which it flows, and from the fact that it now receives its main supply from the Highwood River, by means of under-flow during high-water stages, it must have conveyed all, or a large portion of that stream to the Belly River.

Below the confluence with the Oldman River, the sides of the Belly River valley become steep and precipitous, showing occasional cut-banks of light whitish clay, reaching from 150 to 200 feet above the bottom. The bed of the stream here lies from 100 to 250 feet below the prairie level; and the valley has a width reaching to nearly 1½ miles.

Subsequent to the junction with the St. Mary River, the character of the valley becomes still more pronounced ; the cut-banks more precipitous ; and the slopes steeper. Although the valley is not so wide (about half a mile), the bed of the stream lies at a greater depth ; over 300 feet below prairie level ; and has a low grade, averaging between 4 and 5 feet per mile.

The large quantity of silt carried by the water of the Belly River is deposited in the lower reaches, where the grade is low, in the shape of sandbars and mudbanks. In the upper portion the bed is stony, but more or less silted throughout. There is very little doubt that in any irrigation scheme receiving its supply from this stream, silt will be an important factor for consideration.

The long stretches of clay formation through which the river has cut its way, and the force of the stream at flood stages will readily account for the turbid condition of its waters.

The length of the Belly River, between the south boundary of Township 3, Range 28, W. 4th Meridian, and the north boundary of Township 8, Range 22, comprising that portion of the river within the limit of last season's operations, as nearly as can be arrived at from data at hand, is about 123 miles ; and the total fall, in that distance, 1329 feet ; giving an average grade of 10.8 feet per mile, distributed as follows :—

Elevation on south boundary of Township 3, Range 28=3992 feet.
Elevation on north boundary of Township 4, Range 27=3492 feet.
Distance between the points named, about 22 miles
Average fall per mile, 22.7 feet.

Elevation on north boundary of Township 4, Range 27=3492 feet.
Elevation on east boundary of Township 5, Range 26=3301 feet.
Distance between the points named, about 14 miles.
Average fall per mile, 13.6 feet.

Elevation on east boundary of Township 5, Range 26=3301 feet.
Elevation on north boundary of Township 8, Range 24=2944 feet.
Distance between points named, about 41 miles.
Average fall per mile, 8.7 feet.

Elevation on north boundary of Township 8, Range 24=2944 feet.
Elevation on north boundary of Township 8, Range 23=2758 feet.
Distance between points named, about 28 miles.
Average fall per mile, 6.6 feet.

Elevation on north boundary of Township 8, Range 23=2758 feet.
Elevation on north boundary of Township 8, Range 22=2663 feet.
Distance between points named, about 18 miles.
Average fall per mile, 5.3 feet.

Owing to its peculiar position, the Belly River, although capable of serving a very large irrigable area, can only be applied to one of very limited extent. The principal lands to which it can be applied are : on the west those lying between the Waterton and the Belly, and on the east to the Blood Indian reservation. Possibly, also, it can be applied to a portion of the area lying between the Oldman and the Belly, north-east of the Ridge between the Rivers ; although it is believed that the greater part of the last mentioned area can best be served from the Oldman River by diverting water above Macleod.

For the two former purposes water will, probably, be most advantageously diverted in Township 4, Range 27, where the bounding slopes of the valley are low and the gradients comparatively easy.

For the last mentioned purpose, water would have to be diverted below the mouth of the Waterton River.

Although the irrigable areas to which water from this stream may be applied, on a large scale, are limited ; the extensive and rich alluvial bottoms, along the immediate

bed, present numerous opportunities for local irrigation, both to the denizens of the reservation and the white settlers on the north and west sides of the river.

These fertile bottoms may, thus, be transformed into productive farms and fruitful gardens at a small amount of cost and labour; and requiring no great amount of engineering skill to effect the transformation.

Little advantage has yet been taken of the natural facilities afforded in this direction. A beginning, however, has been made in the case of the Smith & Co. ditch on "Slide-out Bottom" in Township 8, Range 25.

The operations of the survey did not extend farther along the Belly River than the intersection of the north boundary of Township 8, Range 22. Between this point and the confluence with the Bow River, no definite information has yet been obtained.

For discharge measurements, see schedule below.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Belly River.

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 3.	South boundary of Tp. 3, Rge. 28, W. 4th Meridian.	423·8	.....	.....	
Aug. 22.	Sec. 1, Tp. 5, Rge. 27, W. 4th Meridian.	424·6	.....	.....	
Aug. 18.	Sec. 31, Tp. 5, Rge. 25, W. 4th Meridian.	442·1	1445·0	2462·0	
do .	do do	399·3	.....	.....	Check observation of actual discharge.
Oct. 13.	Near intersection with north boundary of Sec. 33, Tp. 8, Rge. 24, W. 4th Meridian.	1129·2	6697·0	10862·0	Below confluence with Waterton River.
Oct. 8.	Near intersection with east boundary of Sec. 25, Tp. 8, Rge. 23, W. 4th Meridian.	2423·3	9839·0	17776·0	Below confluence with Oldman River.
Oct. 10.	Near intersection with north boundary of Sec. 36, Tp. 8, Rge. 22, W. 4th Meridian.	3980·5	20971·0	30656·0	Below confluence with St. Mary River.

LEE CREEK.

Lee Creek receives its supply, primarily, from precipitation on the northerly slopes of Chief Mountain. This is further increased by general run-off from the foot-hill area traversed by the greater portion of its length; also from spring sources situated along the immediate valley of its bed, and in ravines and gullies leading to the same.

The general direction is northerly and north-easterly.

The channel of the stream winds its tortuous course along a narrow valley, little more than a quarter of a mile wide, surrounded by steep hills and precipitous cut-banks, and showing many exposures of sandstone rock; until the St. Mary River is joined, about a mile north of the south boundary of the Blood Indian reservation.

The water in the creek is turbid and conveys a large amount of sediment. As it falls in the summer, a white incrustation is left on the stones and rock from which it recedes.

The stream is evidently subject to freshets during the wetter portion of the year.

At high-water and flood stages, the volume is necessarily large, and will more than suffice for all the demands made upon it by settlers in the valley, if proper storage be carried into effect. During the driest part of the year the flow all but ceases.

The winding course of the stream creates, on alternate sides of the valley, small bottoms, presenting a rich, deep alluvial soil of a most fertile nature. These can all be irrigated from the creek. They are at the present time cultivated by members of the Mormon settlement in this vicinity.

There is no timber of any size in the valley, unless it be near the source; but poplar and willow brush and small cottonwood are seen along the bed of the stream.

The creek flows throughout its length in one channel, the bottom of which is composed of stones and gravel with silt deposit, and in many places the bare rock.

Very little drift appears to come down at flood.

The grade of the bed is very high, showing a fall of 23·8 feet to the mile at the point, where the stream was cross-sectioned near the east boundary of Township 2, Range 26, W. 4th Meridian. The distance from this point to the confluence with the St. Mary River is about 6 or 7 miles.

With regard to facilities for storage, there can be little doubt that the cañon-like nature of the upper reaches of the stream and its branches will afford plenty of opportunities to store flood waters. One point, near the village of Cardston, where this can be done, has been already alluded to.

The only irrigation ditch in operation at the present time is that of the Cardston Co-operative Company; also previously referred to.

For discharge of creek see below.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Lee Creek.

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 6.	Near intersection with east boundary of Sec. 36, Tp. 2, Rge. 26, W. 4th Meridian.	11·3	1136·0	3136·0	Measured at low water.

ST. MARY RIVER.

This is by far the most important tributary of the Belly River, owing to the constant nature of the supply, and its capabilities for irrigating a large section of country.

It is the outlet of St. Mary Lake, situated in Montana, not far south of the International Boundary Line. The lake receives its supply from drainage along the eastern face of the Rocky Mountains. In addition, the St. Mary receives on the west, the waters of Boundary and Lee Creeks, both of which streams head close to Chief Mountain; and on the east Rolph, Pinepound and Pothole Creeks, draining from the northerly and westerly slopes of the Milk River Ridge. None of the last three mentioned are constant in flow. There are a number of smaller water-courses, which convey the run-off from the hilly region in which the upper course of the river lies, and help to augment its supply in the early part of the year.

The general course is northerly and north-easterly. The latter half is extremely tortuous, winding and twisting in every direction. As an illustration it may be stated that, although, the distance from where it crosses the boundary to the confluence with the Belly River is only 48 miles, in a straight line, the actual distance is about 110 miles.

In the upper portion of the stream, in Townships 1 and 2, the valley is defined by rolling slopes and occasional cut-banks, and has a width of about half a mile with a depth of from 100 to 150 feet below the level of the prairie. In Township 3 the valley becomes deeper and the sides more broken and rugged, until, in Township 4, the stream enters a cañon with almost perpendicular sides composed of clay cut-banks, showing numerous layers of sandstone. The cañon is left behind soon after entering Township 5,

and for the remaining part of its course, the stream winds in a deep narrow valley, half to three-quarters of a mile wide, and from 125 to over 300 feet deep; defined by steep slopes and precipitous cut-banks, presenting underlying layers of sandstone and outcrops of coal; and is of such a nature as to offer an effectual bar to the diversion of water for irrigable purposes.

In the upper part of the stream, where the grade is high, the bed is cut into a number of channels, separated by gravel bars, which flow during high-water stages. From the piles of drift heaped on these bars, it appears that a quantity of detritus is brought down at flood; although, in nothing like the quantities that appear on the Old-man and upper portions of the Belly Rivers. The water is here, clear, cold and free from silt. In the lower half, however, the clay formation through which the bed is cut has affected the character of the water, and it is less clear and carries a considerable amount of sediment. The bed of the upper portion is composed entirely of gravel and rounded boulders, and the banks of sand and gravel. In the lower parts, the same character prevails, but there is more rock and the boulders are larger. There is, moreover, but one channel and the stream appears to flow well within its banks.

No timber of any account is found along the stream in Canadian territory.

The flow of the St. Mary River is steady and constant, once the flood stage is past. During the early summer months the volume is large, continuing so until the middle of the summer. This result is doubtless produced by the melting snows in the mountains keeping up the supply of the natural storage basin of St. Mary Lake. The most perceptible difference appears to occur during the months of August and September. For instance: actual flow measured on 23rd August, gave 1209 second-feet; on 4th October measurements for actual flow taken 34 miles farther down the stream gave 821 second-feet; nearly one-third less discharge in little over a month's time.

The irrigable areas to which the waters of the St. Mary River can be applied are: on the west in Townships 2 and 3, Range 25, and to the easterly portions of the Blood Indian reservation. For the former purpose water would, probably, have to be diverted in the northerly portion of Township 1, or southerly portion of Township 2, Range 25. For the latter purpose, somewhere below the junction of Lee Creek.

It is, however, to the lands lying east of the St. Mary, between Belly River and the Milk River Ridge, that its waters are most extensively applicable.

A main canal for this purpose will, most probably, take water from the river in the southern portion of Township 1, Range 25.

The total length of the St. Mary River is about 110 miles. Its elevation on the International Boundary is 4103 feet and at the point of confluence with the Belly River about 2705 feet; thus giving a total fall of 1398 feet; distributed somewhat as follows:

Elevation on south boundary Township 1, Range 25=4103 ft.
do north boundary Township 2, Range 24=3680 do.
Distance between points named about 19 miles.
Average fall per mile about 22·3 feet.

Elevation on north boundary Township 2, Range 24=3680 ft.
do north boundary Township 4, Range 24=3435 do.
Distance between points named about 25 miles.
Average fall per mile about 9·8 feet.

Elevation on north boundary Township 4, Range 24=3435 ft.
do east boundary Township 6, Range 23 =2969 do.
Distance between points named about 34 miles.
Average fall per mile about 13·7 feet.

Elevation on east boundary Township 6, Range 23=2969 ft.
do at confluence with Belly River =2705 do
Distance between points named about 32 miles.
Average fall per mile about 8·3 feet.

For discharge measurements see below

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in St. Mary River.

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 10.	Near intersection with south boundary of Tp. 1, Rge. 25, W. 4th Meridian.	741·3	.....	.....	
Aug. 23.	Sec. 34, Tp. 4, Rge. 24, W. 4th Meridian.	1208·8	2925·0	7770·0	
Oct. 4.	Near intersection with east boundary of Sec. 25, Tp. 6, Rge. 23, W. 4th Meridian.	821·3	3903·0	6941·0	River at low-water stage.

NORTH BRANCH OF MILK RIVER.

Of this stream but little can be said, it having been barely touched by the work of the Division.

It rises in Montana, and has a general north-easterly course to the junction of the south branch, in what would be Township 2, Range 19, West 4th Meridian, had the Dominion Land Surveys been extended to this section of country.

Near the Boundary, it flows in a narrow valley, less than half a mile in width, the bed of the stream lying from 80 to 150 feet below the escarpments.

The stream is small; flows in one channel, between well defined banks; and is in places sluggish and grown with weeds.

Considering the altitude at which it lies, 4120 feet at the Boundary Line, the grade is low; only showing 8·8 feet to the mile, where measured at the point of cross-section.

The volume, at high water and flood stages, does not appear to be here very great, and there are few indications of detritus being brought down at that time.

The bed is stony and at low water choked in places by weeds and silt. The water is turbid and appears to contain a quantity of sediment. The soil in the valley is a light reddish clay with gravel.

The supply is augmented by a number of very small streams, fed by springs in the Ridge. Springs also abound along the valley.

So far as could be observed it will only be useful to irrigate the small bottoms, lying on alternate sides of the stream, along its own valley. These, however, are of very small extent.

No timber was seen in the valley.

For measurement of discharge see schedule below.

MEASUREMENT of Flood discharge, High water discharge, and actual flow of water in Milk River (North Branch).

Meter No. 25. Observer, Arthur O. Wheeler.

Date.	Location.	Measured discharge of water.	Calculated discharge at high water.	Calculated discharge at flood level.	Remarks.
1894.		c. ft. per sec.	c. ft. per sec.	c. ft. per sec.	
Sept. 17	At intersection with south boundary of Tp. 1, Rge. 23, W. 4th Meridian.	16·1	151·0	389·0	River at low-water stage.

GENERAL REMARKS.

Where average fall is given for streams, between points of known elevation, it will be borne in mind that the stated distances between such points are approximate, most of them having been obtained from plots of traverses made by the Dominion Land Surveys, and consequently the tendency is to show a less distance than that actually covered by the windings of the stream ; and, as one is dependent upon the other, a greater fall. The grade is not constant throughout the section for which it is given, but in most cases, decreases proportionally, or nearly so, as the stream is descended.

Local irrigation is referred to above as distinct from general irrigation. By local irrigation is meant : irrigation along river bottoms, and from local sources applied to small areas ; suggested by natural facilities ; or, by the wants of individuals rather than a general community.

In the foregoing remarks, it has been sought to show, in so far as the general character and rapid nature of the survey will permit, the application of our water supply to irrigable areas of large extent ; by means of systems having in view the welfare of whole communities.

Local irrigation has only been referred to incidentally. In most cases small areas are affected ; and the problems presented are easy of solution, involving but little engineering skill and small outlay of capital.

I have the honour to be, Sir,
Respectfully your obedient servant,

ARTHUR O. WHEELER, *D.L.S.*
In charge Division B, Canadian Irrigation Surveys.

PART III.

INFORMATION AND STATISTICS RELATING TO IRRIGATION.

By J. S. Dennis, D.T.S.

Irrigation being a new principle in the arid portion of the North-west Territories is looked upon with suspicion by some, and is but little understood, and the results obtainable thereby poorly appreciated by the vast majority.

Fortunately in establishing this principle in our country we have available, in the many comprehensive reports and text books on the subject which have been published, the experience of a long period of time, of a vast number of irrigation systems constructed and working under diverse conditions, and the researches and observations of men who have devoted their lives to a study of the many complex problems connected with this great work in several parts of the world, particularly in those portions of the United States where irrigation is the recognized means of making agriculture and horticulture successful.

It is proposed in the following pages to place at least a portion of this experience, augmented by the observations of the writer during his examination of the irrigation works and methods of irrigation in many of the States and Territories to the south of us, within the reach of the Canadian irrigator, by assembling, in the form of extracts from these reports and text books, certain information, with general notes thereon, regarding ditch location and construction, the cost of irrigation, methods of applying water to the land, and the results obtainable from irrigation, which it is hoped will prove both of interest and value.

It must, however, be understood that no attempt is to be made to give a text-book on irrigation engineering or practical irrigation, and further, that the information given is largely of that practical character which is designed to assist the owner of small ditches and limited irrigable areas, rather than those large reclamation undertakings which should be based upon particular data procured from a careful consideration of such undertakings by competent irrigation engineers who are well informed on the subjects herein treated of.

DITCH LOCATION AND CONSTRUCTION.

On this continent the introduction of irrigation into any particular district has generally come about through the efforts of early settlers, in the valleys along the streams, to grow crops by the aid of irrigation through small ditches, located and constructed by themselves, heading in these streams and bringing water to their claims; the success which has attended these experimental efforts being followed by the construction of larger systems and the ultimate expenditure of vast sums of money in the reclamation of areas otherwise useless and unproductive.

In the arid portion of the North-west Territories the acceptance of the principle of irrigation and the construction of irrigation works have been a repetition of the experience in other parts of the continent, and, as a consequence, the many primary errors and mistakes which have characterized the subject elsewhere have to a greater or less extent been repeated with us.

It is but reasonable to suppose that in dealing with a new subject mistakes will be made by the most intelligent, and experience to a great extent must be bought, but many of the fatal errors which arise in dealing with such a complex subject as the flow

of water, and the disastrous results which in many cases follow such errors, might be avoided if the pioneer ditch constructor would look further ahead than the particular season during which he is endeavouring to get water to his crop, and would endeavour to design and construct his system on a permanent basis.

In this connection it may be of interest to quote, as illustrating the experience of Colorado in this matter, and as an introduction to the subject of ditch location, the opinion of Mr. George G. Anderson, C.E., of Denver, Colorado, as expressed in a paper read before the Denver Society of Civil Engineers, in which he says:

"It was possible to design works on sound principles without entering into too minute details at first, and it is to be feared that this has not been done. Regarded simply on the question of construction, it is too apparent that faults are numerous, alignments have been bad, grades and velocities established apparently without any consideration, and flumes, headworks, &c., constructed, of which a respectable mechanic would be ashamed. Still, bad as the conditions are, they have their value to the engineer, if nothing more than in showing the mistakes to be avoided in entering upon similar works in new countries.

* * * * * * * * *

"But by far the greater number of mistakes have been due, I think, to haste in the undertaking of the enterprise. Too little time was given or taken by the engineer in which to make himself thoroughly familiar with the physical conformation of the country to be supplied with water. Contracts were let for construction almost before a careful preliminary survey had been made, and the energetic contractor kept close at the heels of the locating engineer, with a consequence that a large percentage of necessarily bad alignment was made, which it is now utterly impossible or impracticable to correct. Probably the best thing that could occur to the irrigation system of north-eastern Colorado to-day would be its entire blotting out from the face of the map, and reconstruction begun upon sound engineering principles."

This opinion is doubtless applicable to most of the states or territories where irrigation is practised, and will also apply to our arid districts unless the experience of these states and territories be used as a guide and warning by our pioneer ditch constructors, at the same time it must be remembered that these pioneer systems, with all their faults, have served to demonstrate the possibilities of irrigation and have reclaimed and brought under cultivation millions of acres of land which might otherwise have remained barren wastes.

DITCH LOCATION.

To the individual settler who is going to construct a small ditch to bring water to his claim, or to the association of several settlers in constructing as a mutual undertaking the more pretentious system which is to supply all their needs, the question of the location of their main ditch is frequently a matter of such secondary importance that it is attempted with the rudest appliances, often in the hands of the most inexperienced, and has in some cases been the result of starting from the source and going in that direction in which it was found the water would follow the plough. It is true many of the systems constructed on these crude principles bring water to the land and are therefore pointed to as evidences of the possibility of ditch construction without skilled aid, but it is perfectly safe to assume that in all these cases intelligent investigation in the inception of the work would have so improved the alignment and slopes of such ditches as to make them much more permanent and efficient.

It may be stated as a fact, based upon the experience of all irrigation countries, that money spent in the inception of any irrigation scheme, great or small, in securing reliable data to aid in determining the best alignment and slope for the canal or ditch is money well invested. In the case of many large canals, or even ditches of moderate size, the time and money spent in preliminary investigations of the topography of the district to be traversed are often sadly insufficient to enable the locating engineer to satisfy himself that the location adopted is the best available, but in smaller undertakings even this partial investigation is frequently dispensed with and no attempt is made to examine the problem of location with intelligence.

To lay down any rules regarding location which will apply to ditches and canals of all sizes is manifestly impossible, and as has been previously intimated the information herein given is intended more for the guidance of the owners of the small systems, who in many cases are their own engineer, contractor and manager, than for undertakings projected and constructed under trained superintendence.

The most advantageous location for a main ditch is that which heads in the stream at a desirable and safe point for the diversion of water, and then reaches the land to be served in the shortest distance, consistent with obstacles to be encountered in construction, without losing elevation, so that it may be continued across the land on that location which will bring the largest possible area under the ditch and thus render it susceptible of irrigation. In considering the question of location it is also important to provide that the alignment adopted will necessitate the smallest number of flumes, culverts, bridges or other perishable structures which add so largely to maintenance expenses of the system, and further to avoid as far as possible those portions of the country to be traversed in which the soil is of that character which will produce an excessive loss from seepage. Another important factor in successful ditch alignment, and one to which little attention has been paid in some of the existing ditches, is the question of curvature. On this subject Mr. H. M. Wilson, C.E., in his Manual of Irrigation Engineering, says :—

"A direct or straight course is the most economical, as it gives the greatest freedom of flow and causes the least erosion of the banks. It also greatly diminishes the cost of construction and the losses by absorption and evaporation consequent on the increased length of a less direct location. It is an error in alignment to adhere too closely to grade lines following the general contour of the country. By the insertion of an occasional fall it is frequently possible to obtain a more desirable location and to diminish the cost of construction by the avoidance of some natural obstacle.

"One of the most serious errors in alignment is the careless location of curves, to which detail too little attention is ordinarily paid. The insertion of sharp bends inevitably results in the destruction of the canal banks, or requires that they shall be paved or otherwise protected to prevent their erosion. On the other hand instances have been noted where engineers have inserted great curves carefully constructed on some fixed radius of absurd length, as though the canal were a railway line. Curvature diminishes the delivering capacity of the canal, and too sharp a curve endangers the structure itself. In large canals of moderate velocity it will be safe in most cases to take the radius of curvature at from three to five times the depth of the canal. As the cross-section becomes smaller or the velocity is increased, the radius of curvature should be correspondingly increased. To keep up the discharge of a canal, either its cross-section or grade should be increased in proportion to the sharpness of the curve."

In reference to the general question of location Mr. Wilson also says :—

"Having determined the source of water supply and its relation to the irrigable lands, the third question in order of importance is the alignment of the canal. This should be so made that the canal shall reach the highest point of the irrigable lands with the least length of line and at a minimum expense for construction. The line of the canal should follow the highest line of the irrigable land, preferably skirting the surrounding foothills and passing down the summit of the watershed dividing the various streams."

These important features seem to have been lost sight of in many of the systems which have been already constructed in Alberta, and the object kept in view has evidently been to get water on to a certain portion of land without considering the possibility of irrigating a much larger area, with very little if any additional labour or cost of construction, had more time and intelligence been expended in examining the country before proceeding with the construction.

The ditch which is located and constructed to irrigate only a small portion of a farm, without reference to the possible future increase in this area, or enlargement of the system to meet increased cultivation, must be looked upon as a temporary structure, and admits of the possible ultimate loss of this additional area for crop production, owing to appropriation of the available water supply to serve other and ofttimes distant land.

In many cases the settler is hampered by want of means and can only undertake the construction of a ditch to meet immediate wants, but even in these cases time and money spent in discovering the best location, and designing the system so as to admit of future enlargement and extension as circumstances warrant, is well invested.

The question of future extension and enlargement is one which should receive serious consideration in the location of many of the ditches which are now being constructed simply for the irrigation of bottom lands adjoining the source of supply. As the interest in irrigation increases, and the results therefrom are more generally appreciated, the owners of bench land farms will want water which can be supplied through the extension of some existing ditch, provided it has been intelligently located, with the resulting return of a considerable proportion of his first outlay to the original constructor.

The best location for a main ditch is frequently departed from in consequence of some obstacle to construction, and a poorer but possibly cheaper alignment adopted, so as to bring the scheme within certain limits of previously determined cost. This must always be the case so long as ditches are constructed subject to the hampering conditions of limited capital expenditure, but it is certain that many of the present glaring faults in location might be avoided if company and individual would recognize that careful and intelligent investigation of the topography of the country to be traversed is absolutely necessary before the question of location can be properly considered, and that in direct proportion to the time and labour spent in securing this topographical information will the location for ditch or canal approach the best one available.

In locating the head or intake for ditches of moderate size certain features should be borne in mind. It is desirable that the headgate should be placed at a point where the banks of the stream are permanent and do not show evidences of washout or change, and where necessary protecting structures will be as small as possible. It is also desirable that the point selected will permit of water being diverted without the aid of a dam, and as nearly as possible at right angles to general course of source of supply.

In the case of ditches of moderate size if the expenditures are anything like equal it pays better in the end to construct the additional length of ditch necessary to attain sufficient elevation on the stream to permit of diversion of water without the aid of a dam, rather than to adopt a more easy and shorter location with added head caused by erection of dam. In the larger number of the streams used as sources of supply for irrigation systems in Alberta, the flood and high water discharges partake of the character of torrents, which are serious factors to reckon with in the construction of dams obstructing their channels, and the loss of diverting dam will in most cases be followed by serious loss to the ditch owner, and probable failure to get water at the time when most needed for the growing crop.

The grade or slope to be given a main ditch or canal is one of the most important questions which enter into the problem of location. On this subject Mr. Wilson, in the Manual of Irrigation Engineering previously quoted, says :—

"*Slope and cross-section.*—These two quantities are nearly related and are interdependent one upon the other. Having determined the discharge required, the carrying capacity for this quantity can be obtained by increasing the slope and consequent velocity and diminishing the cross-sectional area ; or by increasing the cross-sectional area and diminishing the velocity. The determination of the proper relation of cross-section to slope requires considerable judgment. If the material in which the excavation is to be made will permit, it is well to give a high velocity, as the deposition of silt and the growth of weeds are thus reduced to a minimum. A steep slope may result, however, in bringing the canal to the irrigable lands at such an elevation that it will not command the desired area. Again, it may be inadvisable to give too great a cross-section if the construction is in sidehill or in rock, or other material which is expensive to remove. Other things being equal, the correct relation of slope to cross-section is that in which the velocity will neither be too great nor too slow, and yet the amount of material to be removed will be reduced to a minimum. Where the fall will permit, the slope of the bed of the main canal should be less than that of the branches, which should be less than that of the distributaries and laterals, the object being to secure a nearly

uniform velocity throughout the system, so that sedimentary matter carried in suspension may not be deposited until the irrigable lands are reached.

"*Limiting velocity.*—In order that the proper slope may be chosen, one which will produce a velocity that shall not cause silt to be deposited on the one hand, or erode the banks on the other, the amount of such velocities for different soils should be known. In a light, sandy soil it has been found that a surface velocity of from 2.3 to 2.4 feet per second, or mean velocities of 1.85 to 1.93 feet per second, give the most satisfactory results. It has been discovered that velocities of from 2 to 3 feet per second are ordinarily sufficiently swift to prevent the growth of weeds or the deposition of silt, and, other things being equal, this velocity is the one which it is most desirable to attain. In ordinary soil and firm sandy loam velocities of from 3 to 3½ feet per second are safe, while in firm gravel, rock, or hardpan, the velocity may be increased to from 5 to 7 feet per second. It has been found that brickwork or heavy dry-laid paving or rubble will not stand velocities higher than 15 feet per second, and for greater velocities than this the most substantial form of masonry construction should be employed.

"*Grades for given velocities.*—The grade required to give these velocities is chiefly dependent on the cross-sectional area of the channel. Much higher grades are required in small than in large canals to produce the same velocity. The velocity which is required being known, the grade can be ascertained from Kutter's or some similar formula. In large canals of 60 feet bed width or upwards, and in sandy or light soil, grades as low as 6 inches in a mile produce as high velocities as the material will stand. In more firm soil this grade may be increased to from 12 to 18 inches to the mile, whereas, smaller channels will stand slopes of from 2 to 5 feet per mile, according to the material and dimensions of the channel."

The foregoing remarks under the head of ditch location may be condensed into the general statement that the experience to be gained from a study of the irrigation systems of this continent, and of the voluminous reports relating thereto, leads to the conclusion that one of the chief factors in the establishment of any irrigation works, be they large or small, upon such a basis as will give the greatest and most lasting return for the labour and capital expended, is due to that careful location of the works which can only be decided upon after completing full and accurate surveys of the district to be served, and that the attempt to locate ditches or canals without at least a fair knowledge of the country to be traversed and served, has in many cases proved disastrous and disappointing alike to the ditch owner and the farmer depending upon such works for the necessary water to nurture his crops.

DITCH CONSTRUCTION.

Having taken the necessary steps to ensure a good location for the proposed canal or ditch, and headworks or other structures in connection therewith, certain features connected with the construction of the proposed works are deserving of notice.

In the first place it may be stated as an indisputable fact that slovenly or makeshift methods in the construction of any works which are to be subjected to the varying, and in many cases poorly understood, strains of flowing water, are not only unwise but in many cases are followed by disastrous results. The company or individual who start out with the avowed intention of completing its works in a thorough and permanent manner, and who put its intention into practical effect, is certainly following a wise policy from all standpoints. Poor workmanship and slovenly methods do not pay in any undertaking, and probably least of all in structures subjected to the destroying and uncontrollable influences of flowing water.

The headworks of a canal or ditch, being the regulating valve which controls the usefulness of the whole system, are deserving of intelligent thought in their designing and careful supervision in their construction. In large ditches and canals the projection and construction of these works are usually entrusted to qualified men, but in small systems the works are frequently designed and constructed by the owner, who in many cases is poorly informed on the subject.

The most noticeable weakness in the construction of headgates on many of the small ditches examined by the writer, both in the United States and in our own irrigation district, is traceable to a manifest desire to use the smallest possible amount of material and to employ a minimum of labour in putting this material into place. Now, this is the poorest kind of policy, for when disaster comes to such structures, as come it certainly will, the small ditch owner can in many cases ill-afford the cost of replacing the works ;—the cost of building them twice is always more than would have been required to build them properly in the first place,—and the loss of water during the irrigation season, with consequent loss of crop, may mean disaster to many.

Temporary methods and structures are very enticing to the ditch constructor with limited means, but no matter what skimping of labour or material may be resorted to in the construction of the ditch or other structures thereon, the headgate and flume should be of a permanent character, otherwise the ditch owner is simply digging a channel for his own discomfiture.

Before designing the headgate the stream should be examined carefully so that some idea may be gathered, from existing evidences, of the strains which the structure will have to withstand, and a safe margin should be allowed in providing for this strain. In constructing the headgates the bottom of the intake flume should be placed at that level which will admit of the diversion of the amount of water needed at period of low water flow in the stream, otherwise the ditch will only carry water during periods of high water or flood discharge, and will be useless at the time when most needed. This was found to be the case with several ditches examined during last year.

Care must be taken to provide necessary protection against erosion of the banks of the stream on either side of the headgate, and further, that the structure is of sufficient height to prevent flood waters flowing over the top or along the sides of intake flume.

The gates at headworks should be designed so that they may be easily raised and instantly closed.

In constructing the ditch or canal, and main laterals, care should be taken to follow carefully the grades decided upon and previously marked upon the ground, and to conform as nearly as possible to the cross-section adopted. The bottom and banks of the ditch should be cleanly and smoothly finished so as to provide the least obstruction to the flow of the water. When it is intended to carry a portion of the water against a made bank it is desirable that the earth in such bank should be firmly packed when fill is being completed. When filling is done with "slush" scrapers, the bank will generally be sufficiently compact, but if constructed with other kind of scrapers, or with earth moved by shovel and wheel-barrow, the loss of water resulting from seepage through such a bank will be great, and the settling may be sufficient to cause a washout with consequent delay and loss.

Under the most favourable circumstances the loss of water in newly constructed ditches owing to seepage, is not only a matter of disappointment to the average ditch constructor, but of surprise to any one who has not given some attention to the wonderfully absorbent character of the dry soil of most of the arid region, and, if the loss from this source is added to by retarded flow owing to faulty and slovenly construction, the supply available for irrigation is frequently below the requirements of the irrigable area, and much short of what the ditch owner looked for.

The structures on any ditch, such as flumes, bridges, culverts, headgates of laterals, &c., should all be made of as permanent a character as possible, and constructed with good materials and be of the best workmanship. At best the life of such structures is short, and if they are in the first instance constructed with poor materials carelessly put together the system is being hampered in its inception with a heavy tax for maintenance and repairs. As bearing upon the subject of efficient construction in the first place, the following extract from the excellent text book on "Irrigation canals and other Irrigation works," by Mr. P. J. Flynn, C. E., will be of value.

"The sources of impairment of canal property are :—

"First. As to the channel. The water itself carried by the canal, by the erosion of the banks and channel, and the filling of the channel by the deposition of sediment.

"This is a process of self-destruction.

"Second. From the storm or flood water. The denuding of the banks by the erosive action of the elements is a constant source of destruction, although it is a comparatively small item. From the very nature of the alignment or location of the canal it must intercept to a greater or less extent the slope, and consequently the drainage of the country it traverses. If ample provision is made to transfer the flood or drainage water across the canal by means of flumes, culverts, etc., destruction from this source is largely prevented. But, as a rule, provisions of this character are wholly neglected. In many cases, where the slope of the country is sufficient, there is no upper bank to the canal, and the drainage channels are allowed to empty directly into it. Thus the surface water of the entire country above the canal is gathered into it, and the result is, in such cases, a constant rebuilding and repairing of banks.

"Third. The destruction of the channel, and especially the banks, by the range cattle which can only be prevented by fencing the canal.

"The deterioration in the structures of a canal are:

"First. The head works. If these are of such a character as to be proof against the strain and force of the annual floods, and to meet the requirements of the wide range of the fluctuations of the average mountain stream they must be very complete and expensive structures, and quite out of the reach of the average company. The class of work usually adopted, however, is such as to make the liability of destruction and the cost of repair important items in the subject of maintenance.

"Second. Applying to all structures is *decay*. Timber intervening between water and earth, and alternately soaked and dried, is particularly subject to decay, and the life of wooden structures can scarcely be prolonged beyond six or eight years."

The foregoing brief remarks, upon a subject about which volumes might be written, may prove of interest to the large number of small ditch owners, for whom, as has been stated, they have been especially written. The experience of others upon this subject, as set forth in the reports and text books available, may be condensed in the advice:—Spend money in obtaining a well designed and constructed system in the first place, rather than in annually trying to patch and repair so as to counteract the results of ignorance and bad workmanship in the original location and construction of main ditch or structures connected therewith.

COST OF IRRIGATION.

The question of the cost of irrigation is one which affords wide extremes consequent upon the different methods of constructing systems for distribution of the water, and upon the character of the crops raised.

In Alberta irrigation is a work of such recent date, and the records of results so far obtained are so fragmentary and unconnected, that we cannot utilize them in attempting to speak authoritatively regarding the probable cost of reclaiming arid areas by this means. We have, however, available as guide in dealing with this subject, the experience of the United States as condensed in the excellent report on Agriculture by Irrigation written by Mr. F. H. Newell of the United States Geological Survey, and issued in connection with the eleventh census in 1890.

In many of the states and territories dealt with in this report the climatic and topographical conditions are sufficiently similar to those in the arid region of the North West Territories to justify us in accepting them as a fair indication of the results which we may expect. The following schedule and notes thereon, extracted from the above mentioned report, give in a very comprehensive form the cost of irrigation in the United States.

AVERAGE Cost of Irrigation and Cultivation.

States and Territories.	Average first cost of water rights per acre.	Average value of water rights per acre in 1890.	Average annual cost of water per acre.	Average first cost per acre of preparation for cultivation.
	$ cts.	$ cts.	$ cts.	$ cts.
Total	8 1	26 00	1 07	12 12
Arizona	7 07	12 58	1 55	8 60
California	12 95	39 28	1 60	17 48
Colorado	7 15	28 46	0 79	9 72
Idaho	4 74	13 18	0 80	9 31
Montana	4 63	15 04	0 95	8 29
Nevada	7 58	24 60	0 84	10 57
New Mexico	5 58	18 30	1 54	11 71
Oregon	4 64	15 48	0 94	12 59
Utah	10 55	26 84	0 91	14 85
Washington	4 03	13 15	0 75	10 27
Wyoming	3 62	8 69	0 44	8 23
Subhumid region	4 07	14 81	1 21	4 62

" As shown above, the average first cost of bringing water to the land throughout the entire arid and subhumid regions has been $8.15 per acre. This average was derived from the statements of all persons who have constructed ditches, or have purchased water rights from others. It included all cases from those, on the one hand, where the farmers dug or plowed small ditches leading from the creek or river to their land, to those, on the other, where the irrigator purchased the right to take water from some large canal, and embraced all the intermediate conditions where water was obtained through co-operation of neighbouring land owners or through partnerships of farmers. The fact that a person has used water upon a certain number of acres entitles him in many localities to certain rights or privileges. It has become customary to term property of this kind a "water right," and the first cost of applying the water to the land can be considered as the cost of this "water right.

" In the different states and territories there was a wide range in this average first cost of applying water to the land, or of the water right. The highest average was in California, where the most thorough and expensive systems for saving and distributing water have been constructed. The lowest was in Wyoming, where enormous areas have been covered with water by means of ditches quickly and cheaply constructed by means of plough and scraper, the average cost in this latter state having been a little over one-fourth of that given for California.

" The average value per acre of these water rights, wherever they could be considered independent of the value of the land, was $26. This was the average of the values given to this privilege or property by the owners of water rights or of independent ditches. In many localities, however, owing to the scarcity of water or to other causes, the water right cannot be taken from the land without depriving the latter of its entire value, for without a water supply the land is worthless. In such cases the entire value inheres in the water right, and if it is assumed that the average value of the land was $83.28 per acre, at least $80 of this, and possibly more, must be attributed to the water right. Taking those cases in which water rights were transferable and were sold or treated like other pieces of property, the apparent enhancement to the creator of these rights has been the difference between $26 and $8.15, or $17.85 per acre.

" Besides the first cost of water, namely, the expense of constructing ditches from the stream or the cost of shares in some irrigating canal, the irrigator must pay annually a small amount or must expend some labour in order to repair the ditches and keep them in good order, the amount being often only a few cents per acre. Where he takes water from some larger canal, especially one owned by a corporation, he may be compelled to pay a larger sum, that will not only cover the cost of keeping the canal in repair, but will also pay interest on the investment, salaries of officers, and other items of expense. In the aggregate this often amounts to $3 or even more per acre. Averaging all the statements as to the annual cost of water, the result for the entire arid and subhumid regions was $1.07 per acre.

" Since the greater part of the irrigators owned the small ditches used for bringing water from the streams to the land, having built such ditches at points where the conditions were most favourable for construction and maintenance, the annual cost of keeping them in repair has been small, much less than it would have been under other conditions. For example, with the construction of larger irrigating works designed to carry water to land farther away from the streams and to overcome more or less serious obstacles, the first cost of irrigation was usually greater, as was also

the annual cost, on account of the heavy interest upon the original investment, and also from the fact that salaries and other items of expense not entering into the operation of the small ditches were included.

"The average cost of bringing the land under cultivation beyond the expense for water, but including fencing, was, according to the statements of the farmers, $12.12 per acre, ranging from $4.62 per acre in the case of the subhumid states to $17.48 per acre in California, the difference being due both to the configuration and character of the ground and to the amount of labour spent in preparing it for the various kinds of crops. For example, in most of the states where the cost of cultivation was low the ground originally was nearly barren, and there were no plants, except, perhaps, sagebrush, to be removed. In cases where the expense of preparing the ground for cultivation was great, either the ground was rough and uneven, requiring more or less leveling in order that the water might be applied economically, or it was covered with willows and other small trees, requiring considerable labour before the fields could be brought into arable condition. Where fruit trees and vines were to be planted great expense has often been incurred, especially in California."

AVERAGE Cost per mile of constructing Irrigating Canals and Ditches.

States and Territories.	Under 5 feet in width.	5 to 10 feet in width.	10 feet and over in width.
General average	$481	$1,628	$5,603
Arizona	471	1,674	5,274
California	885	5,957	15,511
Colorado	380	1,131	5,258
Idaho	205	810	1,320
Montana	325	800	2,300
Nevada	200	1,150	.....
New Mexico	310	581	6,666
Oregon	260	1,060	1,300
Utah	493	1,025	3,072
Washington	285	1,236	2,571
Wyoming	.....	837	3,884
Subhumid Region	303	447	1,884

NUMBER of Irrigators, Area irrigated, Average size of Irrigated Farms, and average Value of Products per acre in each State and Territory in 1889.

States and Territories.	Number of irrigators.	Area irrigated in acres.	Average size of irrigated farms in acres.	Average value of products per acre.
				$ cts.
Total	54,136	3,631,381	67	14 89
Arizona	1,075	65,821	61	13 92
California	13,732	1,004,233	73	19 00
Colorado	9,659	890,735	92	13 12
Idaho	4,323	217,005	50	12 93
Montana	3,706	350,582	95	12 96
Nevada	1,167	224,403	192	12 92
New Mexico	3,085	91,745	30	12 80
Oregon	3,150	177,944	56	13 90
Utah	9,724	263,473	27	18 03
Washington	1,046	48,799	47	17 09
Wyoming	1,917	229,676	120	8 25
Subhumid Region	1,552	66,965	43	.....

VALUE of Irrigated Lands in Arid Region in 1890, and of their products in 1889.

States and Territories.	Area irrigated in 1889 in acres.	Value of Farms on 1st June, 1890.		Value of Products in 1889.	
		Average value per acre.	Total value estimated.	Average value per acre.	Total value estimated.
		$ cts.	$	$ cts.	$
Total	3,564,416	83 28	296,850,000	14 89	53,057,000
Arizona	65,821	48 68	3,204,000	13 92	916,000
California	1,004,233	150 00	150,635,000	19 00	19,080,000
Colorado	890,735	67 02	59,696,000	13 12	11,686,000
Idaho	217,005	46 50	10,091,000	12 93	2,806,000
Montana	350,582	49 50	17,354,000	12 96	4,544,000
Nevada	224,403	41 00	9,200,000	12 92	2,899,000
New Mexico	91,745	50 98	4,677,000	12 80	1,174,000
Oregon	177,944	57 00	10,143,000	13 90	2,473,000
Utah	263,473	84 25	22,198,000	18 03	4,750,000
Washington	48,799	50 00	2,440,000	17 09	834,000
Wyoming	229,676	31 40	7,212,000	8 25	1,895,000

In applying the figures given above to our arid region it is proper that we should exclude therefrom the experience of those States and Territories where water is used largely for the production of fruit and highly valuable crops, and where in consequence of this valuable crop the irrigation systems will stand a first cost for construction and a subsequent maintenance tax, which would be beyond the limits of financial possibility in producing the crops which will be grown through this agency in our country.

It will be a fair method of deducing something which will prove of value as a guide regarding cost, for us to assemble the results in Colorado, Idaho, Montana and Wyoming, where the conditions of climate, topography and crops produced are sufficiently analogous to those of our arid region to justify the application of those figures to our arid areas.

SCHEDULE.

States and Territories.	Average first cost of water rights per acre.	Average value of water rights per acre in 1890.	Average annual cost of water per acre.	Average first cost per acre of preparation for cultivation.
	$ cts.	$ cts.	$ cts.	$ cts.
Colorado	7 15	28 46	0 79	9 72
Idaho	4 74	13 18	0 80	9 31
Montana	4 63	15 04	0 95	8 29
Wyoming	3 62	8 69	0 44	8 23

From the foregoing it will be noted that the average cost of bringing water to the land is $5.03 per acre. The average annual cost of water is $0.74 per acre, and the average first cost of preparing the land for cultivation by irrigation is $8.88.

These figures can doubtless be assumed as a fair indication of the necessary expenditures under these heads which we must count upon in projecting systems for the reclamation of arid areas.

The statistics of the cost of irrigation in India and Egypt, or upon the European Continent, are of a certain value to the irrigation engineer and for the purposes of comparison, but in all those countries the conditions under which irrigation is practised are so dissimilar to any which exist in Canada, that they are of no value to us as a guide to probable expenditures necessary to bring any given area under irrigation.

In constructing small individual ditches it will of course in many cases be found that the system can be completed and maintained for much lower figures than those given above, but speaking generally on the subject of cost it may with safety be assumed that if we keep our expenditures for systems of any magnitude within the limits of the figures given, the works will have been constructed with intelligence and economy.

METHODS OF APPLYING WATER.

The methods of applying water to the land vary with the crops produced, and are also largely dependent upon the amount of the water supply, and the different systems of cultivation. In the United States the methods in use are largely the outcome of efforts to adapt foreign principles to the existing local conditions, and as it is probable that the methods founded upon the experience thus gained are best suited to our needs it is proposed to devote this article to a description of the systems in use there.

In the inception of irrigation in any district, and where the water supply is plentiful, the methods of applying the water are generally crude and wasteful, but so soon as water becomes scarce and the demands upon the stream or other source approach the limit of its supply for irrigation, the methods of using the water must improve and the "duty" increase.

The question of the "Duty of Water" has an important bearing upon the methods used for its distribution and application to the land, and before proceeding to discuss these methods it will be well to devote some space to a discussion of the

DUTY OF WATER.

In the excellent text book on irrigation canals, &c., by Mr. P. J. Flynn, C.E., previously referred to in these pages, the duty of water is defined as follows :—

"The duty of water is that quantity required to irrigate a certain area of land. In English-speaking countries, it is usually expressed by stating the number of acres that a continuous flow of one cubic foot per second will irrigate. Thus, if a stream discharging 40 cubic feet of water per second is all expended in irrigating 8000 acres of land, then its duty is equivalent to 200 acres, that is, each cubic foot per second irrigates 200 acres. The duty varies from 35 to 2200 acres per cubic foot per second.

"The duty is sometimes expressed by the average depth of water over the whole land, and again, by the cubic contents, as, for instance, the number of cubic yards per acre.

"The duty of water is influenced by different circumstances and varies according to the following conditions :—

1. With the character and conditions of the soil and sub-soil.
2. Configuration of the land.
3. The depth of water-line below surface of ground.
4. Rainfall.
5. Evaporation and temperature.
6. The method of application employed.
7. Length of time the land has been irrigated.
8. Kind of crop.
9. The quantity of fertilizing matter in the water.
10. The experience of the irrigators.
11. The method of payment for the water, whether by the rate per acre irrigated or y payment for the actual quantity of water used."

This very lucid definition will be rendered complete by the following quotation from the report on this subject by Professor L. G. Carpenter of the Colorado State Agricultural College, published in Bulletin No. 22 issued by that institution.

"General considerations affecting duty.

"The amount of water actually needed, as every irrigator knows, varies according to many conditions. The method of irrigation, the slope of the ground, character of the soil, kind and character of sub-soil, the crop, amount of rainfall, the use of water in large or small heads, preparation of ground, the skill and knowledge of the irrigator, thorough cultivation.

"In general, the more rain the less irrigation needed. This is true for crops of the same character and in the same community. It is not necessarily true of different communities widely separated, nor of different crops where irrigation is carried on not from necessity of drouth, but as a means of furnishing nutriment to the plant. The amount used may be very excessive, as in the hay lands of the Vosges in France, which use over 200 feet in depth per year.

"Certain methods will be best adapted to certain slopes and crops. With a given method there is a slope of the ground at which a given amount of water will do the most work. The object being to reach the roots of the plants, unnecessary slowness in the water permits increased evaporation, and perhaps unnecessary absorption. Much more water is needed for a thorough irrigation than one unaccustomed to irrigation would think necessary, but the experience of all countries finds it practically impossible to make an irrigation with a depth of less than three inches of water on sod ground, and from four to six on cultivated crops.

"Different crops require different amounts of water and at different periods. Grasses being grown for forage, an increase of water usually means an increase in product. With the cereals, as well as with grasses grown for seed, there is a limit beyond which irrigation may be detrimental. Different cereals, as well as different vegetables, have different powers of withstanding excessive moisture on the one hand or drouth on the other. Hence irrigation is applied with greater care, and perhaps more frequently in case of scarcity, to the one crop than to the other, and the duties obtained under the conditions of ordinary practice will vary in consequence.

"A soil retentive of moisture will need fewer irrigations than a sandy soil, and if the irrigations in the two cases can be made with the same depths of water, will furnish a higher duty.

"It is a common observation throughout the irrigated valleys that land requires less water after it has been irrigated a series of years. Though we have no definite measures on this point, the fact is one of such common observation that there is no reason to question it. Many times land may cease to need water at all, and may require drainage. The cause of the lessened need is connected with the change in the level of the ground water, which is universally observed. After irrigation the soil gradually becomes saturated with water, and the level of water in the wells rises in the course of a few years sometimes forty feet. After the level has approached the surface, the water which the soil will permit is only that needed by the crops and evaporation, and enough to supply the loss of the ground water by lateral or downward percolation. In the earlier years enough has to be supplied to fill up the sub-soil, and as ordinary soil holds a large percentage of its volume of water, the duty of later years is materially increased.

"It is evident that a permeable or impermeable sub-soil, and its distance from the surface of the ground, will affect the duty. If impermeable and close to the surface, there will be little soil to fill, there will be a higher duty, and more care will be necessary on the part of the irrigator, or he will drown out his crop. A very porous sub-soil, as is found in many cases in our river bottoms, and near mountain streams, requires frequent and abundant irrigations in general, as the water passes through it like a sieve. It is because the sub-soil is of this character that the duty in Northern Italy is so small. Lands which naturally sub-irrigate, as in the San Luis Valley in this State, and the San Joaquin Valley in California, are those where the impermeable sub-soil is close to the surface, and lateral percolation may readily take place, because of the character of the surface soil.

"The character of the flow of the supplying stream also affects the duty of the water derived from it under the conditions of Colorado and most of the Western States. The streams being fed by the melting snows are high in May or June, and low in late summer. In consequence, while there may be an excess of water in the former month, there may be a deficiency in August and September. In many, if not in most cases, there is not sufficient water in late summer, and the crops do not receive what they should, or what their owners would apply if it were to be had. In consequence, it does not follow that an increase in water in late summer would give an increased acreage, but that the area cropped would give better returns and the duty would be less. The cereals which mature early, frequently receive all that would be given them. But alfalfa and other forage crops would receive in most cases one or more irrigations in addition to the two which are now generally given them. In consequence of this it does not always follow that the duties obtained by dividing the acreage cropped by the water supplied to a canal gives a measure of the relative needs of different communities.

"It is partially, if not entirely, due to this that the newest canals will generally give a high duty, for their water supply may be small in proportion to the area underneath, and the early canals with early water rights may appear to use large quantities of water, and thus have small duties. But they will all the more likely represent the practice where there is water accessible whenever needed."

The following extract from the census report on irrigation by Mr. F. H. Newell, already referred to, gives interesting information regarding the probable duty of water in the United States :—

"The average duty of water most widely accepted is that originally taken by Powell as 100 acres to the second foot. In practice some irrigators undoubtedly reach a higher value, and others a lower one. Throughout the arid region there is a popular expression of '1 inch to the acre'; that is to say, water flowing in a stream of moderate size will irrigate at the rate of 1 miner's inch to the acre. The miner's inch is a variable quantity, depending upon the method of measurement and the character of the aperture through which the water flows. In many of the states most of the details of measurement are defined by statute, but even then there is often uncertainty. For practical purposes, however, it may be assumed that in California 50 miner's inches equal 1 second-foot, and in

Colorado and adjoining states 40 miner's inches, or even less, are equivalent to the same. This rate of 1 miner's inch to the acre, therefore, would give an extremely low duty of only 40 or 50 acres to the second-foot, but it is probable that in many localities where there is an ample water supply it is used as freely as this. The saying is so common that the majority of the irrigators who have formed any opinion on the subject have given this as the common practice. Nevertheless there can be little doubt that a higher duty is generally obtained.

"Upon the new lands of Utah, Idaho, and Montana, it is probable that the duty of water averages about 70 acres to the second-foot, and that it can be readily brought up to 100 acres. In California, in localities where water is scarce and great care is taken in using it, the duty has been found to be 200 acres or more, in exceptional cases rising to 500 acres or more, this high water duty being obtained usually in the case of orchards, in which the water is conducted by pipes to each tree. The state engineer of Colorado in the fifth biennial report estimates the duty of water of certain streams at from 168 to 424 acres per second-foot, using in this connection the acreage estimated by the water commissioners. By substituting the acreage from which crops were obtained as shown by this census, the duty has been found to be from 90 to 200 acres to the second-foot. This high duty of water is unquestionably due to the fact that some of the water returns by seepage to the stream, and is used a second time. As a conservative estimate, as well as a convenient one, 100 acres to the second-foot may be considered as the average duty which has been obtained under favourable conditions and by the employment of ordinary skill on the part of the irrigator."

The foregoing information may be supplemented by the following schedule of the duty of water in the United States, which has been compiled from available authorities on the subject.

DUTY of Water in certain parts of the United States.

State or Territory.	Duty per second foot.
Colorado	90-100 acres.
Montana	70-100 "
Idaho	60 "
Wyoming	70 "
Utah	90 "
New Mexico	60 "
Arizona	100 "
California	100-500 "

Having a thorough understanding of the duty of water we proceed to the question of methods of distributing the water by reproducing from the Report on Irrigation 1893, issued by the United States Government, the exhaustive and thoroughly practical article on this subject, by Mr. C. E. Grunsky, C. E., of San Francisco, California.

METHODS OF APPLYING WATER TO LAND, AS PRACTISED IN THE CENTRAL PORTIONS OF CALIFORNIA.

"Irrigation is still a new art in California, and the methods of applying water to land which have found favour in different parts of the State are the outgrowth of attempts on the part of irrigators to adapt methods in use in other localities and countries to new conditions as here found. These attempts have met with more or less success, and have resulted in the adoption of a variety of methods of irrigation, each of which is more or less perfectly adapted to the peculiarities of climate, soil, and physical features of the region where practiced. When irrigation is accomplished with water from ditches the methods of irrigation may be classified as follows:*

"Irrigation by flooding.

"Irrigation from furrows.

"Irrigation by causing a rise of the ground water.

"Irrigation from subsurface conduits.

"Flooding may be accomplished by turning water out of small ditches constructed on the highest ground and making it flow in thin sheets over the surface (not specially prepared) to be irrigated. This is locally called ".wild flooding." Or it may be accomplished by constructing embankments of such height that the water which they restrain will cover the land. This is irrigation by flooding in checks. (A check is a compartment or basin inclosed by check levees.)

* "No attempt is here made to describe methods of irrigation as practiced elsewhere, but it is hoped that California's experience may prove serviceable to other sections and irrigators. This data is brought down to August, 1891."

Plate 1.

Wild Flooding.

Fig 1 Plan.

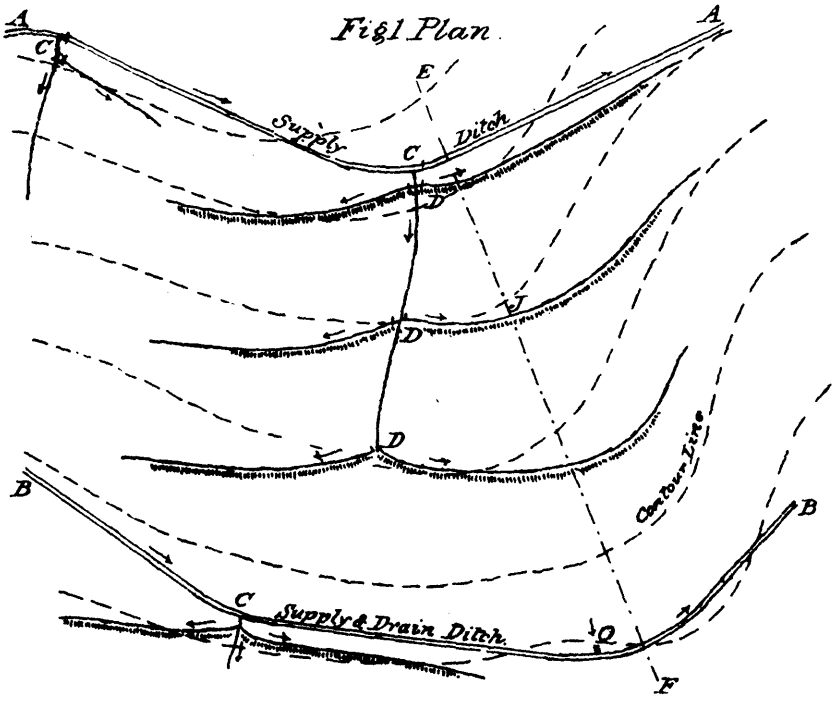


Fig 2. Section EF.

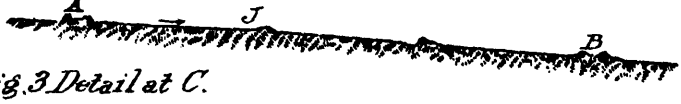
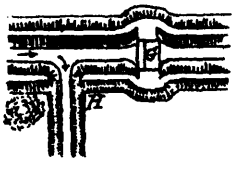


Fig 3 Detail at C.



Check Gate in Supply Ditch.

Fig 5. Plan

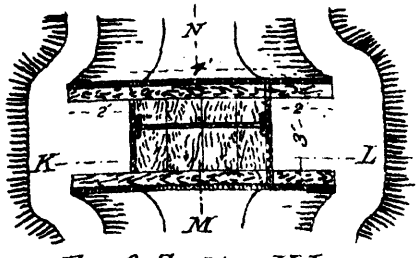


Fig 4. Ditch at J.

Fig 7. Section MN.

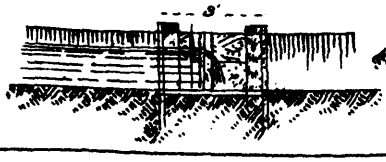


Fig 6. Section KL.

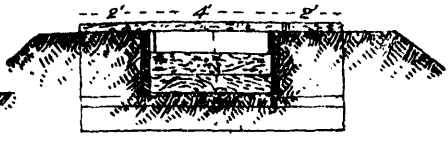


Plate 2.

Flooding in Contour Checks

Fig. 1 Plan

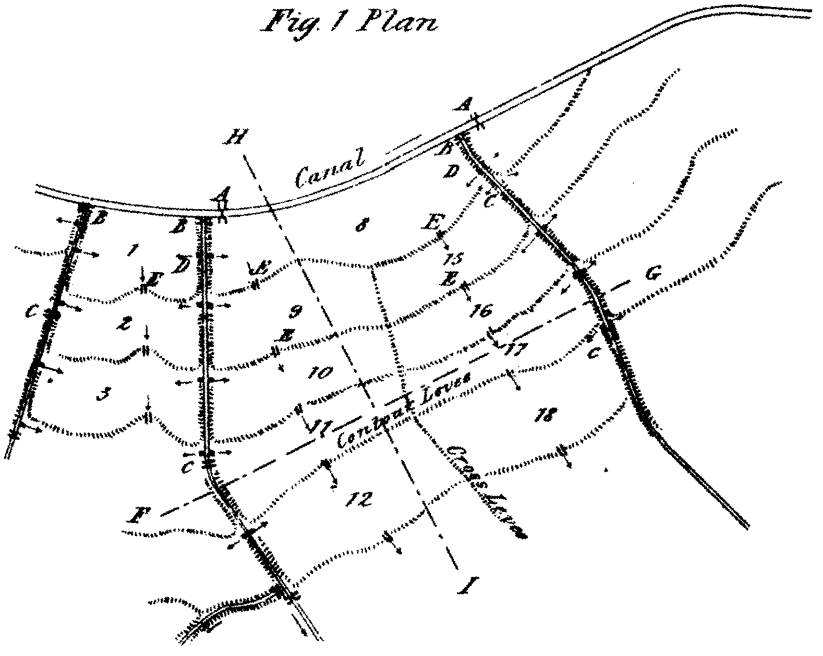


Fig. 2. Section FG (enlarged)

Fig. 3 Section HI (distorted).

Check-Levee Profiles

Fig. 4

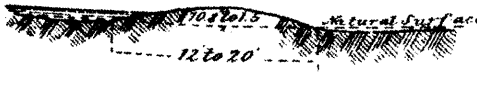


Fig. 5

Fig. 6.

"The embankments may be adapted to the configuration of the ground, each of the main embankments being placed on a contour line. The method of irrigation is then called "flooding in contour checks." If the embankments are constructed along the sides of rectangles, the method of irrigation is then called "flooding in rectangular checks." The surface of the ground in a check can be made perfectly level. Irrigation in such checks is called "irrigation in level checks."

"Furrow irrigation," like flooding, is intended to supply water only to that part of the soil into which penetrate the roots of the plants, trees, vines, &c., to be irrigated. It is sometimes practiced for grain, more frequently for plants, trees, vines, &c., which are set out in rows. "Furrow irrigation with drainage" provides for the collection of all surplus water flowing through each furrow, and its subsequent utilization. In "furrow irrigation" no surplus water is permitted to enter any furrow.

"Irrigation by causing a rise of the ground water" can be practiced only under certain favourable conditions. It involves the rapid sinking of water from canals and ditches into the subsoils and imperfect drainage of the latter.

"Irrigation from sub-surface conduits," or "sub-irrigation," as it is generally termed, supplies water to the surface soils only through pipes or other conduits from which water escapes and permeates the soil.

"It is well to bear in mind that it is just as important to conserve the moisture already in the soil as it is to add moisture. This fact has been taught by experience to the irrigators in San Joaquin Valley, and it has become a universal custom to cultivate the irrigated tract as soon after the application of water as possible. The surface soil is broken up and pulverized. The capillary forces of the soil are reduced to a minimum and the weeds kept down. The furrows in use to distribute water are plowed in, and, if the irrigation is to be repeated the same season, new furrows are drawn

WILD FLOODING.

(See Plate No. 1.)

"The practice of wild flooding can best be explained by reference to the diagrams illustrating this method of irrigation. In the plan, Fig. 1, the curved broken lines represent contours and indicate a slope of the surface of the ground in the direction from E to F. AA is a supply ditch, whose water is diverted as required, at CC, into irrigating ditches.

"The irrigating ditches are sometimes permanent, sometimes temporary. Out from the irrigating ditches to the right and left, at the points D, are small embankments, with nearly horizontal crests. Material for their construction is taken from their upper sides, thereby forming a depression which serves the purpose of a watering ditch. These embankments are usually permanent, and are so flat that they do not interfere with ordinary farming operations. Irrigation is commenced by turning water from the supply ditch into the irrigation ditch at C. It is checked at D by means of a temporary dam of earth, or by means of a small gate, and flows to the right and left. As soon as water attains the height of the embankments, out from D, it commences to flow over them and to flood in a thin sheet the land intervening between the first embankment and the next one below. If too much or too little crosses the embankment at any point, the defect is remedied by attendants, whose presence is constantly required during the process of irrigation. At the second point, D, the operation is repeated, and so on until the surplus water reaches an inlet into a drain ditch, which may at the same time be an irrigating ditch for other lands. The preparation of ground for this method of irrigation is very inexpensive, but the cost of applying water, owing to the constant attendance required, is great. One man can irrigate from 1 to 2 acres per day by wild flooding. This method of irrigation is sometimes called "mustang irrigation."

"Fig. 2 is a section from E to F. Figs. 5, 6 and 7 illustrate an improved arrangement of a four foot gate for a small supply ditch.

FLOODING IN CONTOUR CHECKS.

(See Plate No. 2.)

"When land is to be flooded by irrigating in contour checks, water is brought to the highest points of the tract to be irrigated by means of a supply canal or ditch, from which branches may lead off about in the direction of the greatest slope in the ground surface if this be not excessive. Distance between these irrigating ditches in practice is very variable, sometimes as great as one-half mile, but such distance is permissible only when very large volumes of water are available for flooding.

"The farther apart that these ditches are placed the greater should be their capacity. The land between these irrigating ditches is divided into compartments by levees constructed from ditch to ditch on contour lines. These should not be made more than 12 to 18 inches high. The total fall of the ground from one to the next lower may be six inches to one foot. Where the ground is sufficiently flat to permit of less fall between the levees it is still better to adopt a fall of less than six inches. Where the ground is so steep that levees more than one foot apart in vertical elevation would be required in order to obtain the necessary space between them for the levee construction, some other system of irrigation should be adopted.

"When the compartments between ditches and successive contour levees are too large they are frequently sub-divided by a cross levee midway between the two ditches. This method of irrigation is illustrated by plans and diagrams on Plate No. 2.

"At the points A A of the main canal are check weirs (drops or gates). At B B B are the head gates of the irrigating ditches. At C C C are check weirs in the irrigating ditches. At D D D are

gates in the sides of the irrigating ditches which serve to admit water into the compartments or checks to be flooded. At E E E are gates in the levees between checks through which surplus water of any check may be allowed to flow into the one next below it.

"To irrigate the check No. 1, water is admitted into the irrigating ditches upon each side of it, and from these through D D into the check. As great a volume of water as possible is forced into this check until the contour levee backs it upon the main canal levee. As soon as this occurs the irrigation of the land in this check is complete, and the gate at E between 1 and 2 is opened at the same time the gate from both irrigating ditches into check No. 2 are opened, and the operation is repeated for each check in turn until the last check between the first two irrigating ditches has been filled. The surplus water from the last check may be disposed of into a drain or into lower irrigation canals according to local circumstances.

"When all the land between the upper two irrigating ditches has been flooded water is turned into check No. 8. Should full heads of water be available for both of the ditches to the right and left of check No. 8, then the flooding of 9 and 15, 10 and 16, etc., may proceed simultaneously, otherwise irrigation should proceed in the order in which the checks are numbered in the diagram. On sandy soil or sandy loam the time required to fill a check should not exceed three hours, otherwise there will be great waste of water. If a check can not be filled in this time its size has not been properly adapted to the available head of water. Either the check is too large or there is not enough water turned in.

"On heavy soil, which does not take up water so rapidly as sandy soil, time to fill a check should not exceed twenty-four hours. In practice some checks are made very large up to 60 acres in area and the amount of water turned in to flood them has been as great as 250 cubic feet per second. Such areas in one check are not advisable and should be regarded merely as temporary features of a very extensive irrigation system.

"Checks with areas of 8 to 10 acres are large, and preferred sizes are 2 to 5 acres.

"The embankments in use for irrigation by this method may be temporary or may be permanent. If temporary they are plowed down after irrigation so as to avoid obstructing farming operations. If permanent they may either have the profile shown in Fig. 4 or that in Fig. 5. Sometimes they are made even steeper, with still narrower crest than that indicated in Fig. 5.

"The flat profile indicated in Fig. 4 is rapidly finding favour. It is the only one which can be recommended. The flat levee does not interfere with any farming operations; it is plowed and cultivated just the same as any part of the field and generally produces the best crop. It is constructed by plowing the ground to the right and left of the levee center in a strip 80 to 100 feet wide. The ground loosened by the plow is scraped toward the center and will be found sufficient for such levees as are ordinarily required. Alfalfa and grain are the crops ordinarily irrigated by flooding in contour checks.

"The cost of preparing land for this method of irrigation in permanent checks ranges from $2.50 to $5 per acre, and the cost of the necessary distributing canals, ditches, and structures from $3 to $5 per acre. These figures, of course, may be greatly exceeded if the ground's surface has too great a slope or is very much broken by hog-wallows, or swales and ridges. Irrigation by this method is much less expensive than by wild flooding. The only labour required of attendants is the opening and closing of gates and the guarding of the check levees. When ground is well prepared for this method of irrigation, and the supply of water is abundant, the cost of each application of water will range from 3 to 30 cents per acre. The best examples of irrigation by this method are found on Kern Island, on the Calloway Canal; on Buena Vista farm, watered by the Kern Valley Water Company's canals in Kern County; near Borden and Madera, Fresno County; on the Columbia and Chowchilla ranches irrigated by the Chowchilla canal; on the west side of the San Joaquin Valley, and at various points in the Sacramento Valley.

FLOODING IN RECTANGULAR CHECKS NOT LEVELLED.

(See Plate No. 3.)

"When the surface of the ground is sufficiently smooth it is frequently possible to substitute a system of rectangular checks for the irregular shaped checks of the contour levee system. This may be done either by placing the main check levees as nearly parallel to the contour lines as possible, or by adapting the exterior lines of the checks to any desired course regardless of the direction of the greatest slope of the ground's surface. In this system of irrigation the main levees as well as the cross levees, must have a varying height. In this respect it differs materially from the contour check system where the dimensions of the main check levees are uniform.

"The dimensions of the levees are most variable when the levee lines are adopted arbitrarily without regard to direction of contour lines. This system of irrigation is illustrated by diagrams on plate No. 3. Ground is supposed to slope gently from the upper left hand corner of Fig. 1 to the lower right hand corner. The highest point of ground in each compartment or check is therefore in the upper left hand corner. All levees as well as ditch banks must be higher above the surface of the ground at the lower right hand corner of each check than at any other point. The size of the compartment must necessarily be smaller than would be required for contour levees unless the ground's surface be very flat. But the method of applying water after the ground has been once prepared is the same as for flooding in contour checks. The system of flooding in rectangular checks has the great advantage of permitting levees and ditch lines to be adapted to the direction of rows of trees, vines, etc., and it ought to be adopted whenever the configuration of the ground will permit.

Plate 3

Flooding in Rectangular Checks.

(not level)

Fig. 1. Plan

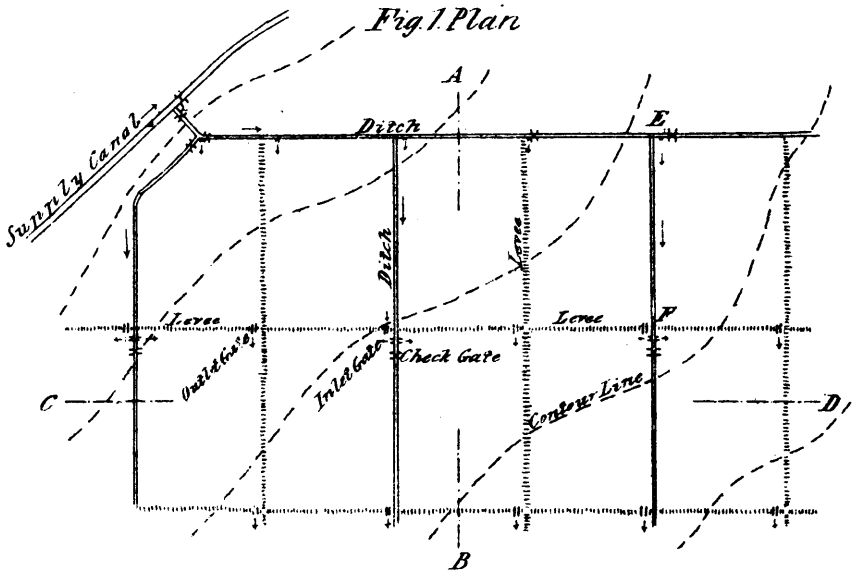


Fig. 2. Section AB (distorted)

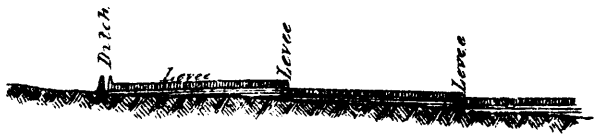


Fig. 3 Section CD (distorted)

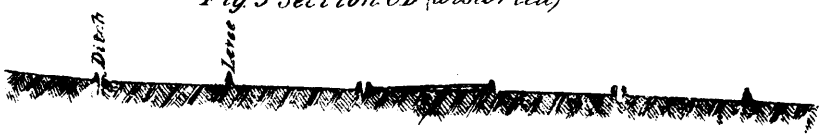


Fig. 4. Detail at E.

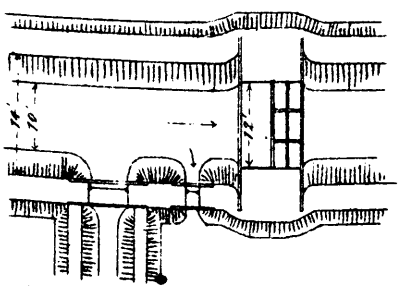


Fig. 5. Detail at F.

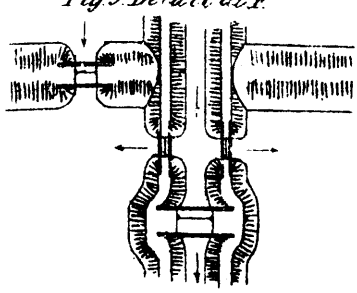


Plate 4.

Example of Flooding in Contour and Rectangular Checks without levelling.

(Kohler, West and Minturn.)

Fig. 1 Plan.

Sec. 13, T. 9 S. R. 15 E.

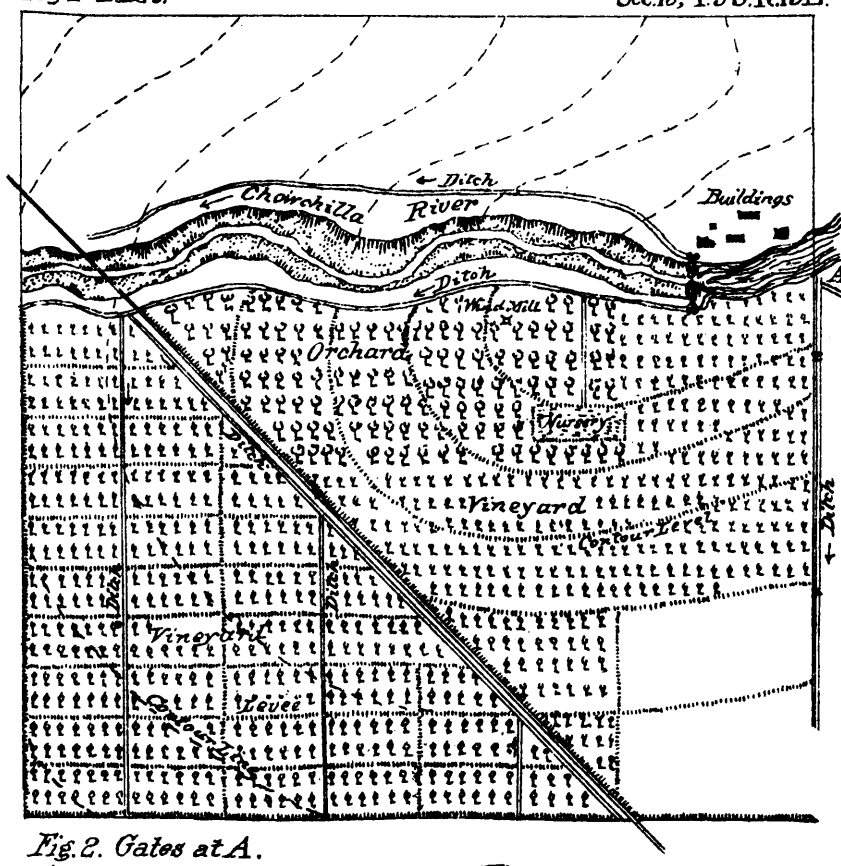


Fig. 2. Gates at A.

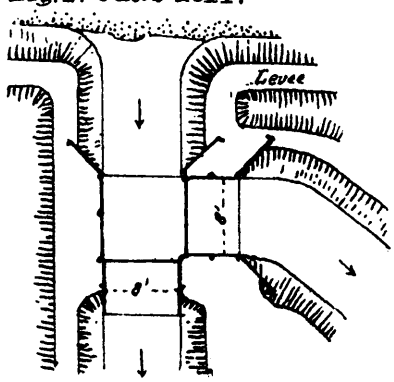


Fig 3. Dam in Chowchilla River

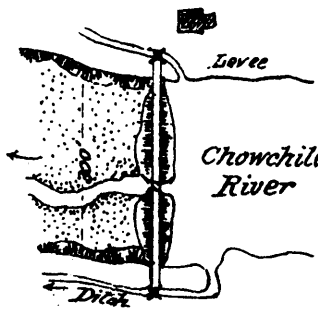
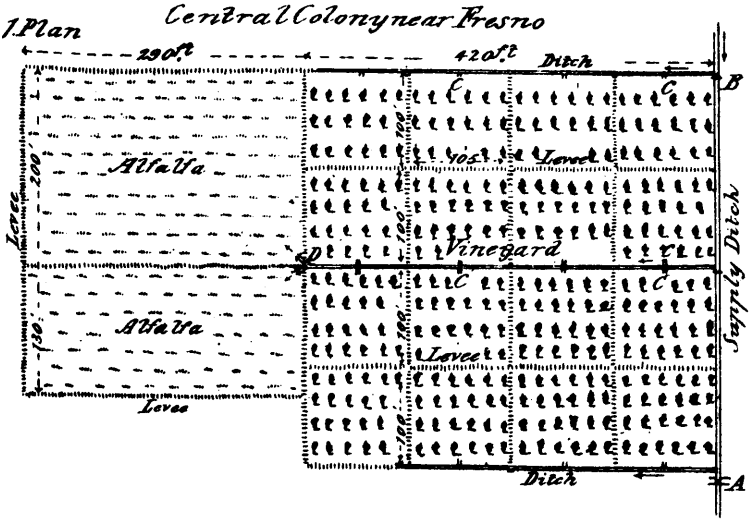


Plate 5.

Flooding in small level Checks

Fig. 1. Plan — Central Colony near Fresno



Movable Check Gate at B.

Fig. 2. Elevation.

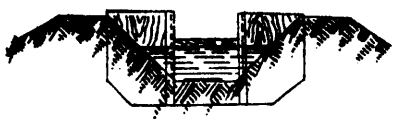
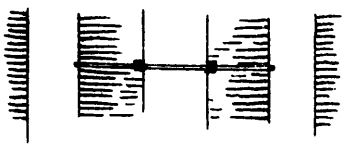


Fig. 3. Plan



Inlet at C.

Fig. 4. Vertical Section.

Fig. 5. Horizontal Section.

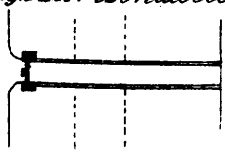
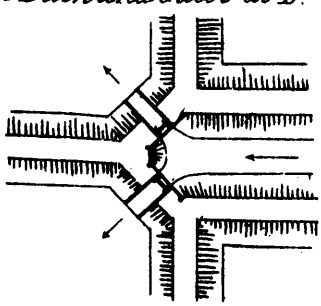


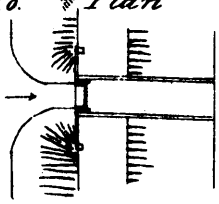
Fig. 6. Ditch and Gates at D.



Inlet Gate at D

Fig. 7. Section

Fig. 8. Plan



"Attention is drawn in this connection to the Kohler, West and Minturn tract, at Minturn, at Chowchilla River, Fresno and Kern counties. (See Plate No. 4.) At the time this tract was visited, in 1884, most of it had been set out to trees and vines. Irrigation was accomplished by water diverted from Chowchilla River. Part of the tract is prepared for irrigation by the contour check method, the rest by the rectangular check method.

"The rectangular checks are arranged as indicated in the plan (Fig. 1). They are about 660 feet long east and west, by 330 feet north and south. The method of admitting water and drawing it off from each check into the next lower one as soon as the flooding of the check has been accomplished, is the usual one already described. Water is supplied by distributing ditches, arranged about as indicated in Fig. 1.

"In Fig. 3 the general arrangement of the works for the diversion of water is indicated, and Fig. 2 will explain the arrangement of the head gates in the various distributing canals. The soil of the Kohler, West and Minturn tract is a light sandy loam. Under it lies a hardpan which is quite near the surface at the eastern line of the tract, but its dip westward is greater than that of the surface of the ground. The ground water is about 14 feet below the surface.

"When irrigation is in progress with a full head of water (about 16 cubic feet per second) six men are required to manipulate gates and guard check levees. Attendants work in two shifts of three, each for twelve hours. Where the levees are constructed on contours the area of the several checks is variable, the largest covering about 20 acres of ground. The contour levees are in 6 inch contour lines. All these are made sufficiently high to retain water to the depth of 1 foot.

"Irrigation, while contour checks are being flooded, progresses at the rate of about 40 acres per day of twenty-four hours, and at the rate of 20 acres per day while the land covered by rectangular checks is being irrigated. The greater time required in the latter case is due to the two causes, that the soil in these checks is deeper than at points east of the railroad, and that water used for its irrigation is generally subdivided, being made to irrigate a number of checks at the same time, whereby in porous soil unnecessary loss of water is always entailed.

FLOODING IN LEVEL CHECKS.

(See Pl. No. 5.)

"In some localities where the surface of the ground is neither sufficiently smooth nor sufficiently level to permit an application of water by either of the methods already described without too great an expense, another method of flooding has found favour. Such has been the case near Fresno. It has there become customary to prepare land for flooding by constructing rectangular checks and making the area inclosed by each rectangle of levees as nearly level as the nature of the soil would permit.

"Size and relative length of the sides of the rectangular checks are always to be governed by the peculiar character of the ground's surface. It is evident that if the checks be made very long in the direction of the slope of the ground, it may become necessary to move a very large amount of material from the highest end of a check to its lower end. Very frequently the entire work of levelling consists in the cutting down of knolls and the depositing of the material thus obtained in the low places of the check and along the line of the embankment which is to surround it. It sometimes happens, as on the sandy plains in the Fresno district, that when water is applied to the land for the first time the soil is compacted, the surface settles. This settling may be quite regular, but ordinarily it is irregular, and not infrequently a caving in of the surface soil occurs in spots, leaving cavities sometimes 20 or more feet in diameter and 4 to 10 feet deep to be refilled after the first thorough wetting. Where such caving in has occurred it is quite evident that the complete leveling of the ground's surface can often be accomplished by a judicious selection of the points from which to take material for the purpose, with as little expense as a mere haphazard filling of the depressions would entail. Where the surface of the ground is of the peculiar knolly character generally termed "hog wallow" the same is true.

"An example of this method of irrigation has been taken from a tract in Central California Colony (Fresno County), and is illustrated on Pl. No. 5. The plan (Fig. 1) represents the ditches and levees required to accomplish the irrigation of sixteen small checks of vines and two larger checks of alfalfa. Water is supplied by the ditch B A. It is distributed to the several checks by the ditch C D and parallel ditches. Low levees very flat, just high enough to hold with reasonable safety about 4 inches of water, surround each check. Between each two small ditches, C D, are two rows of checks. Each of the vineyard checks has an area of about one-fourth of an acre. The alfalfa checks are larger, the area of one being about 1¼ acres, that of the other three-fourths of an acre.

"The irrigation of any row of vineyard checks is accomplished by checking the flow of water in the main ditch below an irrigating ditch, as at B, and admitting the water in turn into the several checks which are to be supplied from the irrigating ditch. Irrigation, except in the case of very impervious soils, will ordinarily be complete as soon as water has been made to cover all the ground of any check to a depth of 1 or 2 inches. The more pervious the soil the more important will it be to supply a respectively large flow of water to each check. As soon as enough water has been supplied to any check the inlet gate, opening from the distributing ditch into another check, is opened and the gate leading from the former check is closed.

"Wherever on sandy loam more than three hours time is required to thus supply enough water to any check, then there is something wrong in the method of applying water. Either the size of each check ought to be reduced or the supply of water increased.

"In 1882 an irrigator was observed who was engaged in irrigating four small checks of alfalfa. His water supply was small, only about 2·26 cubic feet per second. Instead of turning all the water in turn into the several checks he apportioned it to the four and the time to fill them was ten hours, whereas not more than an hour apiece would have been required had they been filled one after the other.

"Returning to the example of irrigation illustrated on Pl. No. 5, it is evident that the flow of water in the ditches can be checked either by means of small gates or by means of temporary dams of earth thrown in with a shovel during the process of irrigation. A movable check gate of very simple construction is shown in Figs. 2 and 3. It consists in the main of a notched board with narrow strips nailed to it on either side of the notch, and a set of loose pieces of boards whose ends can be slipped down the grooves formed by the strips for the purpose of closing the notch. A check gate of this character can be set across a ditch at any point where it is required in a very few minutes. It can be made more secure than it would otherwise be by nailing to its lower margin and to its sides a strip of canvas to be imbedded in the material used in refilling the excavation made to receive the gate. A permanent gate as at A can be arranged as already explained by Figs. 5 and 6, Pl. No. 1.

"The inlet gates at C from the small ditches to the several checks are arranged in the form of a small culvert, as shown in Figs. 4 and 5, Pl. No. 5, or they have the form represented in Figs. 7 and 8. The arrangement of levees, ditches and gates at the point D of Fig. 1 is made clear by Figs. 6 and 7.

"No drainage is combined with this method of irrigation. All the water admitted into a check is absorbed by the soil. It is to be noted in connection with the experience of the early irrigators near Fresno, that the quantity of water absorbed by or rather percolating through the soil was at times enormous. Instances have been recorded where enough water has been run on to a 20 acre tract at one wetting to cover the tract to an average depth of 5 feet, and examples can be cited where the quantity of water supplied in one season would have been sufficient to fill a reservoir of the same area as the tract irrigated 20 feet deep.

"The preparation of land for irrigation by flooding in level checks is much more expensive than the preparation of land for irrigation by any of the other methods already described.

"It costs about $15 to $50 per acre to put the surface in proper shape and to construct the necessary ditches and gates. But the application of water when once preparation for it has been properly made is far less expensive than by other methods, and this method of irrigation enables a very economical use of water, because the wastage by unnecessary percolation into sub-soils is reduced in the same proportion that the time required to fill individual checks is reduced.

IRRIGATION BY FILLING SUB-SOILS WITH WATER.

(See Plate No. 7.)

"It is not infrequently claimed that large tracts of land are irrigated by lateral percolation of water from canals or ditches. As a matter of fact lateral percolation does not extend more than a very short distance from a water course, unless the same supplies water to a very pervious soil resting on a sub-soil of clay or other impervious material. The phenomenon of the wetting of the soil at some point remote from the water course which supplies the water is ordinarily due to a very different cause. Where the surface of ground water is very nearly level the effect of an additional supply of water to sub-soils by downward movement of water from canals and ditches will be to cause it to rise to a higher plane. It will rise most rapidly at those points where most water sinks into the ground, but its rise may extend over a very large area of country. The hydrostatic pressure exerted by the sinking water extends in all directions, and may cause a displacement and a rise of water even at very remote points. If water sinks into pervious sub-soils at many points throughout a relatively flat region it may cause the sub-surface water to rise sufficiently to bring moisture from below within reach of the capillary and hygroscopic forces of surface soils.

"This occurs in the Mussel Slough country and it has become the common method of irrigation in that region. The same phenomenon is observed near Fresno and at other points north of Kings River.

"The method of irrigating by filling sub-soils with water, as practiced in the Mussel Slough country, is illustrated on Pl. No. 7. Fig. 1 represents the plat of a tract of 160 acres. In the northeast corner is a small orchard and an alfalfa field of a few acres. The alfalfa is enclosed by a levee, so that at least once a year it may be flooded in order to exterminate gophers. A main canal passes through the tract, and from this distributing ditches are diverted and carried down along the west and north lines of the tract. About 600 feet apart small irrigating ditches lead out from the distributing ditches. These have a very slight grade in order that water may be kept at a sluggish flow in them during the irrigating season.

"As soon as water becomes available for irrigation it is turned into all the ditches (which may be permanent or temporary), and the depth to ground water of October to December, as shown in Fig. 2, is gradually decreased until water is everywhere found at a depth of only a few feet below the surface. As soon as irrigation is complete water is no longer admitted into the irrigating ditches, and the depth to water begins to increase slowly. By careful inquiry it has been ascertained that before irrigation commenced, that is, before 1870, the depth to ground water ranged everywhere in this region from 15 to 18 feet. Except on the extreme edges of the region it no longer falls lower than 8 feet below the surface in the fall of the year. During the spring and early part of the summer it is held by reason of the presence of water in the irrigation ditches within 2 to 4 feet of the surface.

Plate 6.

Furrow Irrigation of Grain.

Fig 1. Furrows in the direction of greatest slope

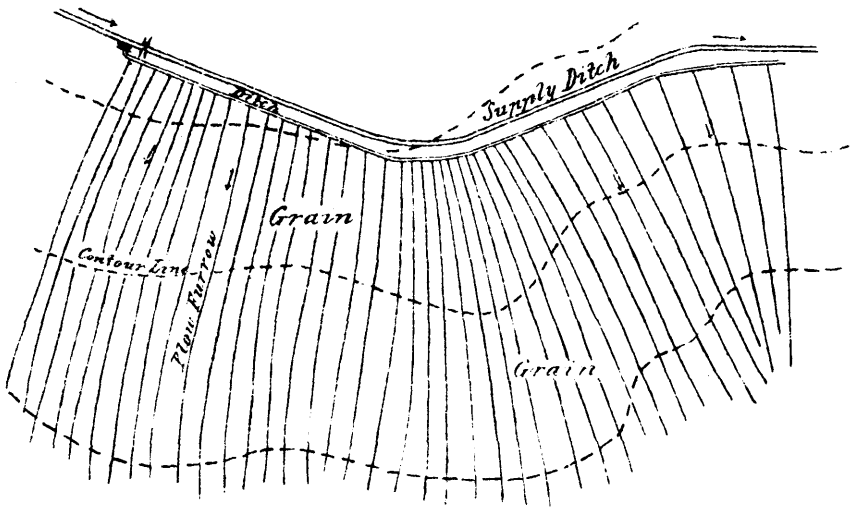


Fig 2. Furrows at less than greatest slope.

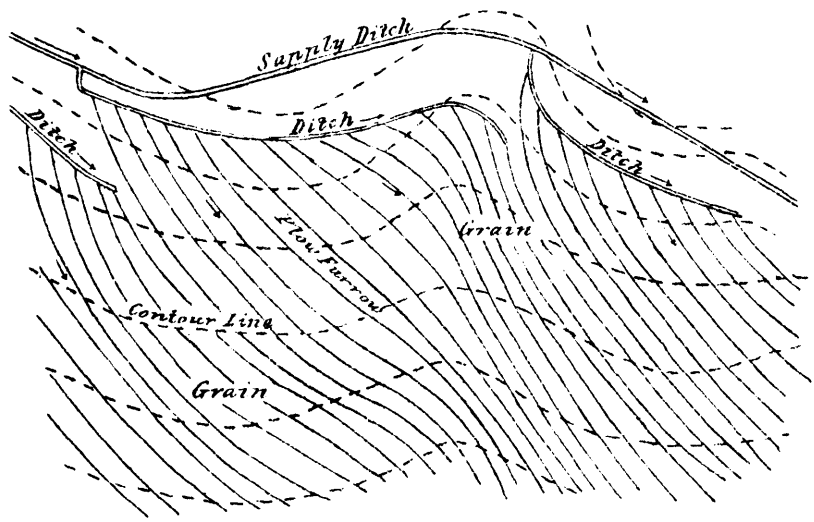


Plate 7.

Irrigation by filling Subsoils with water.

Mussel Slough Country.

Fig. 1. Plan.

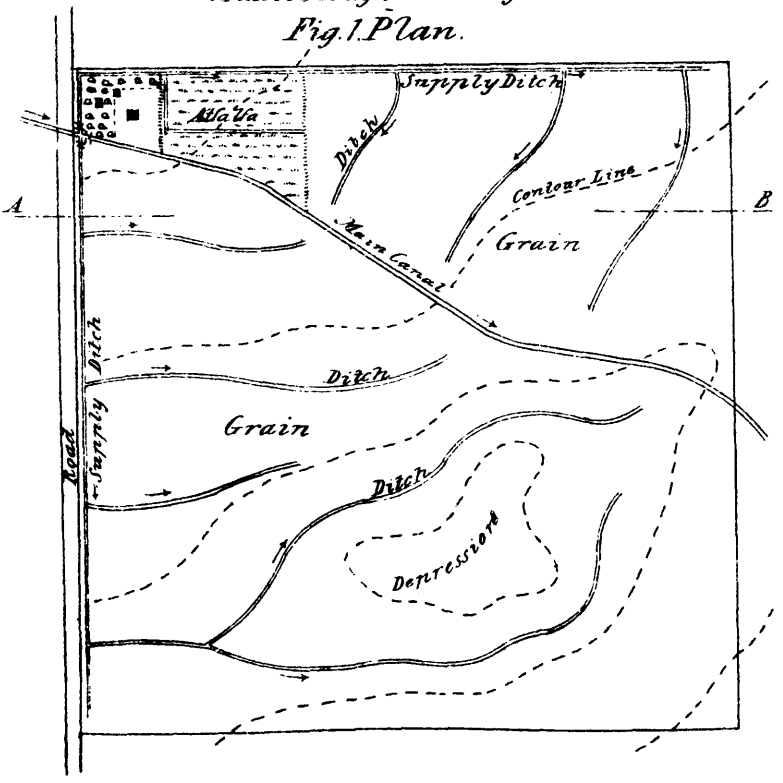
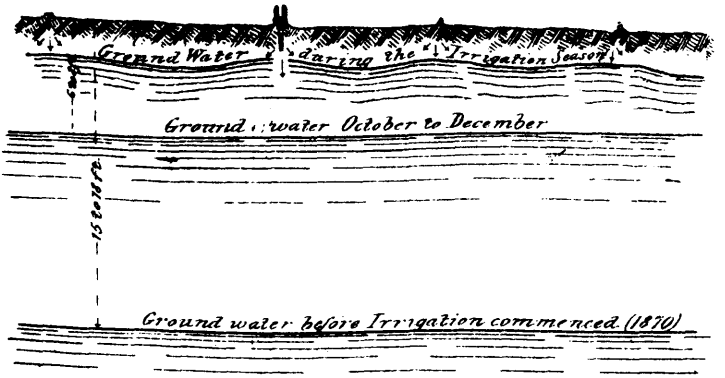


Fig. 2. Section AB.


Ground Water during the Irrigation Season
Ground water October to December
15 feet
Ground water before Irrigation commenced. (1870)

"It will be seen that, where this method of irrigation is practiced, lands lying between irrigated tracts may derive a full benefit from irrigation without being taxed to contribute to the establishment or maintenance of the irrigation system. The mere fact that the water has been permanently raised from 18 feet below the surface to 8 feet below the surface may in many instances be a great benefit.

"The system of applying water to the soil from underneath has the advantage of being very inexpensive. It is, however, open to serious objection when soils or subsoils contain much alkali. In such cases alkaline salts are carried upward by the upward moving water and their accumulation at the surface is the natural result. Many of the irrigators in the Mussel Slough region testify to such rise of the alkali, and to the fact that salt grass is crowding the alfalfa, and has not infrequently usurped parts of grain fields.

IRRIGATION FROM FURROWS.

"Not the least important method of applying water to land is that which is ordinarily called furrow irrigation, and which is almost universally adopted for the irrigation of orchards, vineyards, cotton, hops, vegetables, or other plants that may to advantage be set out in rows. By this method of irrigation it is aimed to moisten only those layers of soil into which the roots of trees and plants penetrate. Surface drainage is sometimes combined with this method of irrigation. More frequently, however, no attention is paid to drainage, the aim being to introduce into each furrow barely enough water to accomplish the desired end.

"This method of irrigation can be best described under the following heads :—

"Furrow irrigation of grain—

"(*a.*) With furrows in the direction of greatest slope.

"(*b.*) With furrows across the direction of greatest slope.

"Furrow irrigation of orchards, vineyards, &c.

"(*a.*) With drainage.

"(*b.*) Without drainage.

"Furrow irrigation in leveled checks.

"Furrow irrigation of vegetables.

"Furrow irrigation of hillside orchards, &c.

"All of these special cases have been illustrated with diagrams, to which reference will be made in describing each.

FURROW IRRIGATION OF GRAIN WITH FURROWS IN THE DIRECTION OF GREATEST SLOPE.

(See Plate No. 6, Fig. 1.)

"Even when water for the irrigation of grain land is available, the farmer is not inclined to burden himself with the additional expense of applying water to land so long as he may hope to have sufficient rainfall to mature his crops. In the most extensively irrigated region of the San Joaquin Valley the average annual rainfall is about 10 inches. This is sufficient to produce good crops if the rain falls at the right time. It does not always do this, and moreover the total rainfall is just as frequently below the average as above it. Consequently it often happens that water must be artificially applied in the spring of the year to refresh the parching fields of grain. If the same be prepared for flooding this method of irrigation will be resorted to. Should it be situated in a region like the Mussel Slough country, ditches will be kept full of water, and perhaps a few new ones will be constructed to hasten the rise of ground water. But if the same be not thus favoured, then the question arises how to apply water to its surface most rapidly. The method which in some localities, as for instance near Kingsburg, has found favour, is that of irrigating in parallel furrows. The same method has there also been successfully practised for the wetting of ground before it was plowed and the seed sown.

"If the slope of the ground's surface be not too great, the furrows, which are generally deep single furrows, are run in the direction of the slope. They are placed 8 to 12 feet apart, according to the porosity of the soil. Water is admitted into them from small ditches, generally crossing them at intervals of 100 to 200 yards. The irrigation commences at the highest part of the field. Water is admitted into a number of furrows at one time, and by attendants this flow is checked or aided so as to accomplish a general soaking of the ground's surface. It is thus aimed to wet all parts of the field. This system of irrigation involves much labour and careful watching. It is relatively expensive.

FURROW IRRIGATION OF GRAIN WITH FURROWS ACROSS THE DIRECTION OF GREATEST SLOPE.

(See Plate No. 6, Fig. 2.)

"This method of irrigation is analogous to that just described, except that, owing to too great slope of the surface of the ground, the plow furrows are run on predetermined grade lines. The greater the slope of the surface, the greater must be the deviation of the furrows from the direction of the greatest slope. Ordinarily no attention is paid to properly draining the field irrigated in this way, it being the aim of the irrigator to supply just enough water to accomplish the wetting of the surface soil.

"The furrows used for the distribution of water to accomplish the irrigation of grain are, as soon as irrigation has been accomplished, plowed in, so that they may not interefere with subsequent farming operations.

FURROW IRRIGATION OF ORCHARDS, VINEYARDS, &C., WITH DRAINAGE.

(See Figs. 1 and 2, Plate No. 8, and Fig. 2, Plate No. 9.)

"Whenever any plants set out in rows are to be irrigated, the natural method of applying water to the soil is that of conducting it in furrows between the rows. In this method of irrigation, when rows are far apart, it may sometimes be advisable to draw a furrow for water upon each side of every row of trees or vines. Ordinarily, however, one furrow between each two rows of trees or vines is preferred.

"Furrows are generally made by plowing between rows away from the center, thus raising the ground near the rows, lowering it midway between them. The work of plowing is finished by making the last furrow a double furrow. Sometimes ditch machines, prepared especially for the purpose, as, for instance, a long log with a wedge-shaped head, are drawn through the plow furrows to finally prepare them for water.

"This method of irrigation can best be explained by reference to Plate No. 8, Fig. 1. The ditches supplying water are there represented by double lines, or by single heavy lines. From these water is admitted into the furrows between the rows of vines, trees, hops, or cotton, as the case may be. Care is taken to admit it at the same time to a sufficient number of furrows to reduce its flow in each, so that no washing of the soil will result. At the lower end of each furrow the water collects in a small drain ditch, which carries it off for further use. It is allowed to flow through each furrow long enough to permit a sufficient percolation into the loose soil along its course. The application of water should always commence at the highest point of the field to be irrigated. Furrows are not generally more than 300 feet long, unless the ground's surface be unusually smooth and the soil quite impervious.

FURROW IRRIGATION OF ORCHARDS, VINEYARDS, &C., WITHOUT DRAINAGE.

(See Fig. No. 3, Plate No. 8.)

"It frequently happens that the soil to be irrigated absorbs moisture so fast that there is little or no danger of supplying water to any particular spot in the field to be irrigated in so great quantity as to do injury to the plants there growing. It has, therefore, become a common practice to irrigate with furrows from the highest points of a field toward the lowest, without making provision for drainage. Ditches and furrows are arranged as indicated in Fig. 3, and great care is taken to admit no more water into each furrow than will just wet it from end to end.

FURROW IRRIGATION IN LEVELLED CHECKS.

(See Fig. 1, Plate No. 9.)

"When a few years ago it was feared that the ravages of the phylloxera might be extended into the vineyards of Fresno county, it was deemed advisable by some vineyardists to set out all vines in checks which could be completely submerged. Fortunately such submersion to combat the phylloxera has never become necessary. But the preparation of the ground which had been made led to a new method of applying water to the land. From a supply ditch water is admitted into a small ditch upon one side of each check, and from this small ditch it enters deep, horizontal furrows, which have been drawn between each two rows of vines. As soon as water has filled all the furrows, irrigation is complete and the head of the check ditch is closed.

FURROW IRRIGATION OF VEGETABLES.

(See Plate No. 11.)

"When irrigation must be more frequently repeated than in the case of orchards, vineyards, etc., as in the case of vegetables, the surface of the ground is more thoroughly prepared for the reception of water; the handling of the water is simplified. It is customary to set out most vegetables, strawberries, etc., in rows that are close together. Each row is on a ridge of ground from a few inches to a foot high. Each row is short, varying from 5 to 20 yards. Water is supplied to a tract of vegetables in a ditch located on the highest ground. Thence at right angles to the direction of the rows of vegetables branch ditches lead through the tract past the end of the row. Each row of vegetables and the depression between it and the next row are horizontal. Water is admitted from the small irrigating ditch to the furrow or depression between the rows to the right and left, being checked at convenient points in the irrigating ditch until all furrows above these points have been filled with water. Surplus water standing in the furrows when gates and dams have been removed, will, to some extent, find its way back into the irrigating ditch; the rest finds its way into the soil. The arrangement of ditches and levees necessary to accomplish this irrigation is made fully apparent in Figs. 1, 2, 3 and 4 of Plate No. 11.

Plate 8.

Furrow Irrigation
of Vineyards and Orchards.

Fig. 1 With Drainage.

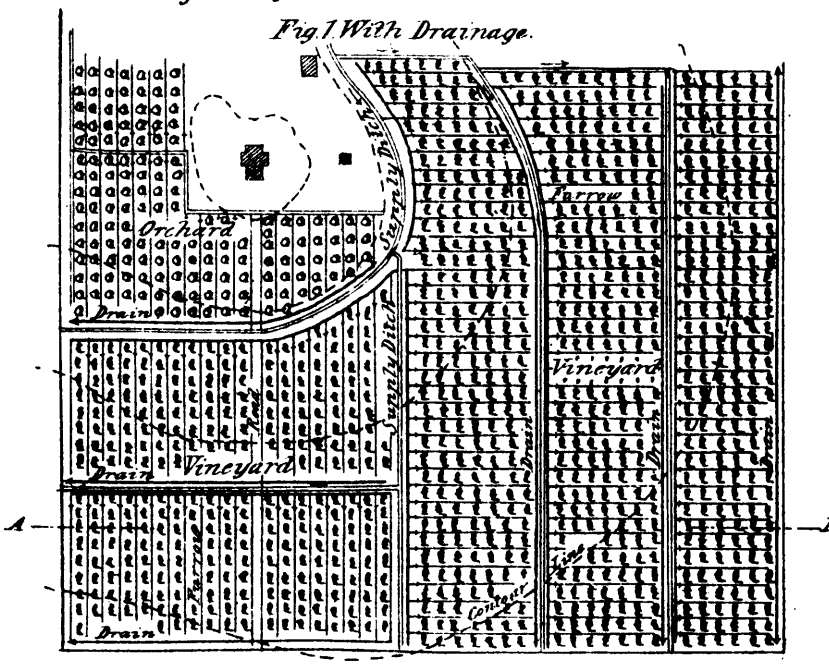


Fig 2. Section AB

Fig. 3 Without Drainage.

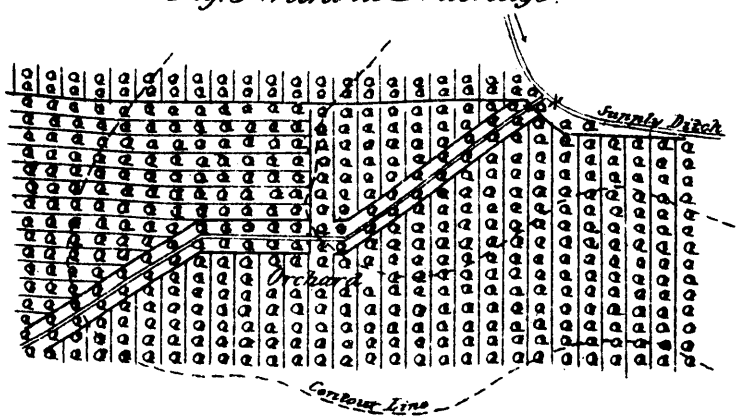
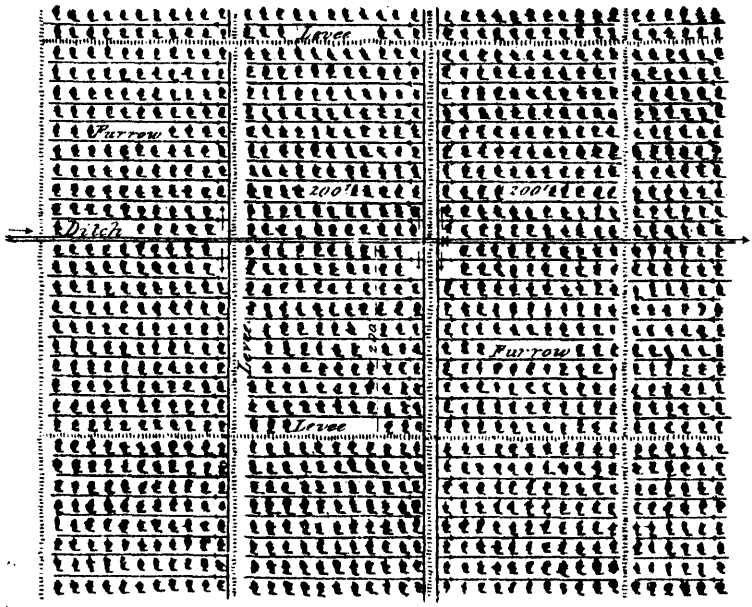


Plate 9

Furrow Irrigation of Vineyards

in level Checks.

Fig. 1.



Furrow Irrigation with Drainage.

Fig. 2. Vineyard near Fresno.

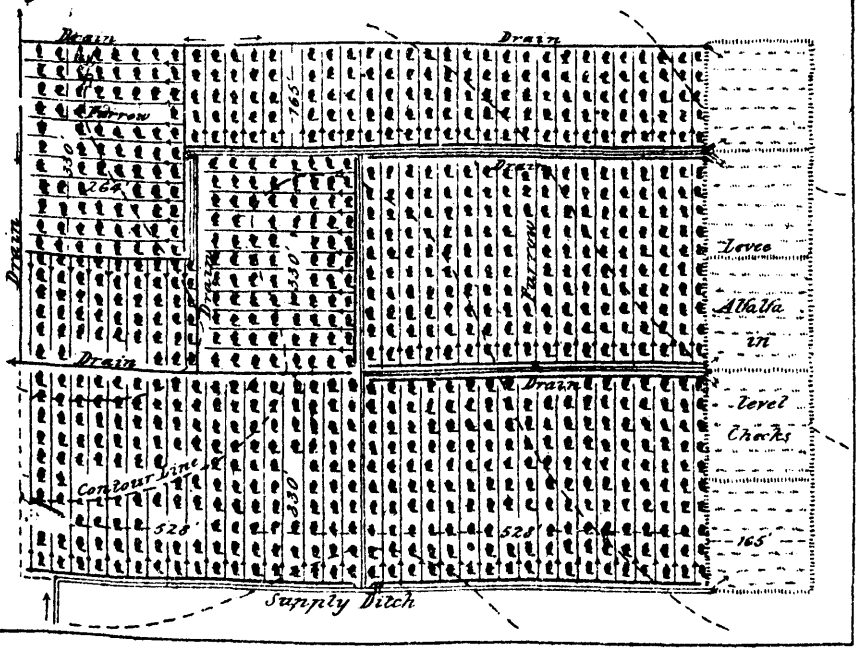


Plate 10.

Hillside Irrigation

Furrow System

Fig. 1.

Orchard near Porterville

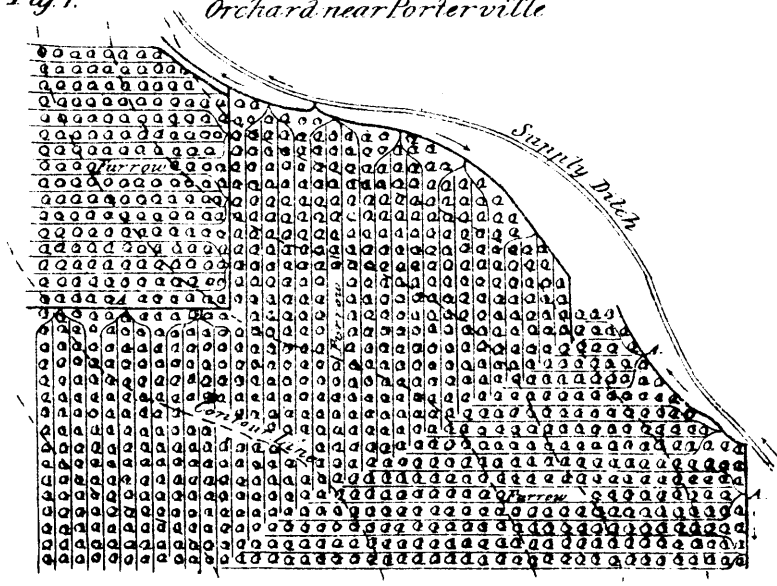


Fig. 2. Detail at A.

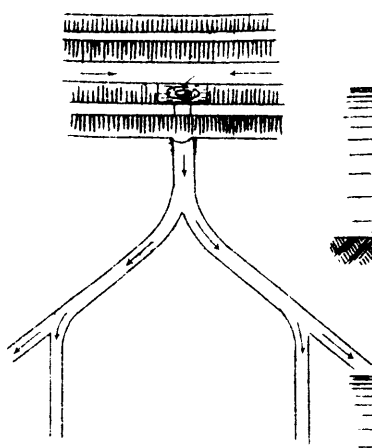
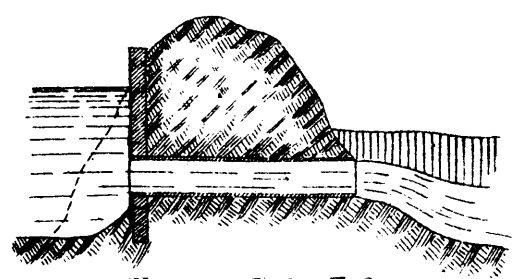


Fig. 3.



Furrow Inlet Tube.

Fig. 4.

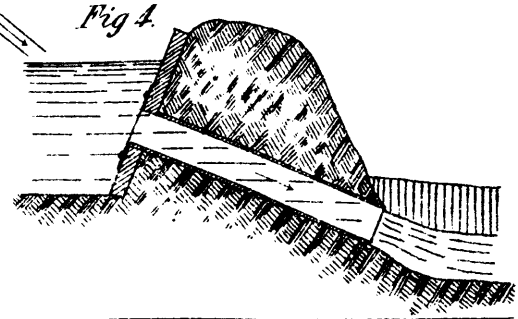


Plate 11.

Irrigation of Vegetables, Berries, or other Crops closely set in rows.

Fig 1 Plan

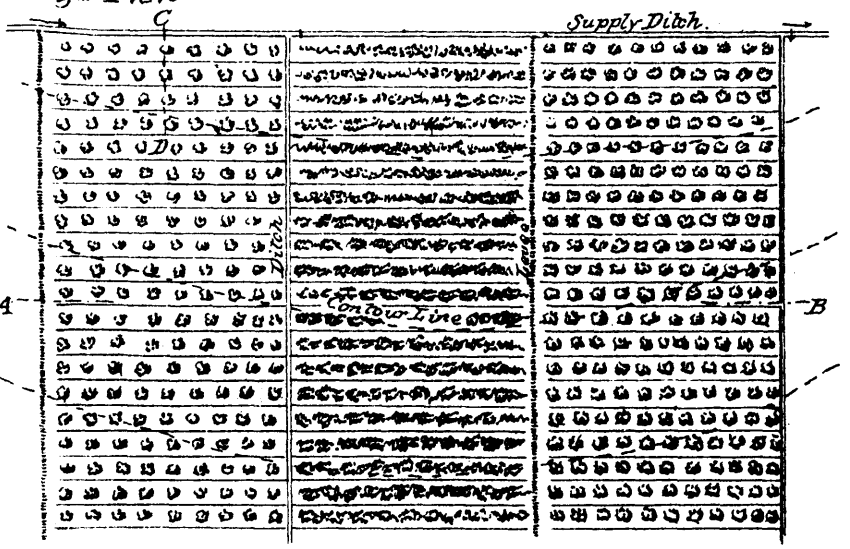
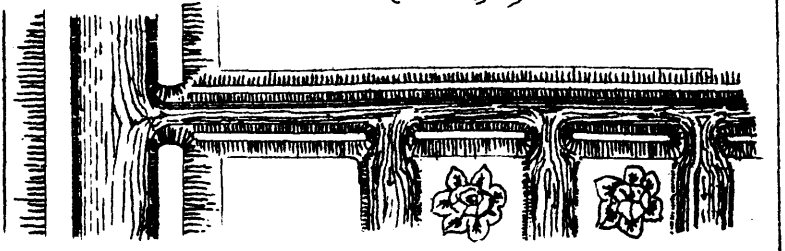


Fig 2 Section AB

Fig 3. Section CD (enlarged)

Fig 4 Part of Plan (enlarged)



FURROW SYSTEM OF HILLSIDE IRRIGATION.

(See Plate No. 10.)

"Without attempting an elaborate discussion of the bestmethods of irrigating hillside lands, it is desired to call attention here to a method employed by an intelligent irrigator on a moderately steep hillside set out to fruit trees a few miles above Porterville, in Tulare county. The soil was of the nature of dry bog, very dark in colour, sticky when wet, cracking and crumbling when dry.

"The supply ditch followed a grade line around the hillside above the orchard. At selected points it was tapped by smaller ditches, which carried the water along the hillside, below the main ditch, on a somewhat greater grade. Into the lower banks of these irrigating ditches tin tubes were imbedded, fitted into headboards resting against the inner side of the ditch bank, as shown in Figs. 2, 3 and 4 of Plate No. 10. These tubes were in use to obviate the necessity of cutting the ditch banks and to prevent the washing out of cuts in these banks, which would result if the tubes were not in use. They are only temporary features in the bank, being removed as soon as they are no longer required at any particular point.

"These tubes can be made of any thin material, like galvanized iron or tin, which can easily be bent into the desired form. The great advantage of using some contrivance similar to these tubes is the ease with which the amount of water taken from the ditch at any point can thereby be regulated.

"The water delivered through each tube was subdivided into three or four furrows, drawn as indicated in Fig. 1, between each two rows of trees, through a well plowed and well pulverized soil. One attendant, without any hard labour, could keep small streams trickling down thirty furrows at one time. After irrigation the entire surface layer of the soil of the orchard was wet, and much water had penetrated into the substrata of soil."

The accompanying plan illustrates the proposed method of applying water for irrigation on the property of Mr. Wm. Pearce, near Calgary, Alberta.

In projecting a system of this kind it is first necessary that the required surveys should be made to permit of the contours of the tract to be watered being located on the plan ; when this is done the best location for main ditch and laterals is readily decided upon, and these having been projected the furrows for the general distribution of the water can be laid down.

In the system illustrated it will be noted that the area to be watered has comparatively little slope, and that contours have been determined for each six inches. In fields having a marked slope this nicety of surveying would probably not be needed, but in flat country the value of a careful survey, and intelligence in projecting the system so as to bring the greatest area under water, are very clearly illustrated by the accompanying plan.

Inexperienced irrigators are as a rule inclined to apply an excessive quantity of water to the land, resulting in the growth of a wasteful habit of using water, and in many cases in serious injury to the land through water-logging or the production of alkali.

In the absence of any rules, founded upon actual experience in our arid region, regarding the quantity of water needed for different crops, it must for sometime be largely a matter of experiment with most irrigators before they become conversant with the amount of water, or number of irrigations, required to produce the best results, but it may be accepted as the experience of those countries where irrigation has been carried on for long periods of time that supersaturation of the soil is unwise, and that no more water should be applied to the land than is actually needed to mature the crop.

RESULTS FROM IRRIGATION.

Statements regarding the results to be looked for from the irrigation of the arid portion of the North-west Territories cannot be based upon the fragmentary, and in many ways experimental, efforts which have been made there during the past two years to produce crops by this means, we must therefore again make use of the experience of the United States in this great work to aid us in forecasting the results which, under similar conditions, we may reasonably expect.

What irrigation has done for the arid region of the United States is graphically illustrated by the following schedule extracted from the United States census report for 1890, which has been already used in discussing the subject of cost of irrigation.

VALUE of Irrigated Lands in Arid Region in 1890, and of their products in 1889.

States and Territories.	Area irrigated in 1889 in acres.	Value of farms on June 1, 1890.		Value of products in 1889.	
		Average value per acre.	Total value, estimated.	Average value per acre.	Total value, estimated.
		$ cts.	$	$ cts.	$
Total	3,564,416	83 28	296,850,000	14 89	53,057,000
Arizona	65,821	48 68	3,204,000	13 92	916,000
California	1,004,233	150 00	150,635,000	19 00	19,080,000
Colorado	890,735	67 02	59,696,000	13 12	11,686,000
Idaho	217,005	46 50	10,091,000	12 93	2,806,000
Montana	350,582	49 50	17,354,000	12 96	4,544,000
Nevada	224,403	41 00	9,200,000	12 92	2,899,000
New Mexico	91,745	50 98	4,677,000	12 80	1,174,000
Oregon	177,944	57 00	10,143,000	13 90	2,473,000
Utah	263,473	84 25	22,198,000	18 03	4,750,000
Washington	48,799	50 00	2,440,000	17 09	834,000
Wyoming	229,676	31 40	7,212,000	8 25	1,895,000

In considering the above figures it must be remembered that the area irrigated in all these States and Territories was useless for agricultural purposes until reclaimed through the artificial application of water; and the enormous sum of $296,850,000 given as the estimated value of farms in 1890, with $53,057,000 as the value of the products of these farms in 1889 is the direct result of irrigation. These figures, when compared with the details of cost of irrigation, as given by the same authority and previously quoted, provide an object lesson regarding results which is sure to surprise those who have not given the question consideration and should silence the most skeptical in their antagonism to the principle.

The figures above given embrace the results obtained in some States and Territories where the topography and climatology, and the kind and value of crop grown, are so different to what will be produced in our arid region that they cannot fairly be made use of in forecasting the conditions which we may hope for, but, if we base our deductions upon the results shown by this schedule for Montana, which is only separated from our arid region by an imaginary line, and is almost identical with it in topographical and climatic conditions, we are justified in assuming that, other things being equal, our experience will not be less satisfactory than theirs.

Enthusiasts regarding irrigation possibly claim for it some features which are debatable, but what irrigation has done for Montana, and several of the other States and Territories, it certainly can be made to do for our Territories, and considering that we have more comprehensive and complete irrigation laws, and, in the western portion of our arid area, a probably more generally distributed water supply, it is fair to assume that the results quoted may possibly be improved upon.

If we assume that wild land in the arid area is worth $2 per acre, which is a high estimate except for bottom lands along streams, and add to this the average first cost of bringing water to the land, $5.03, we have the land with a water right costing $7.03 per acre. We now add $8.88 the average first cost of preparing the land for irrigation making a total capital expenditure of $15.91 per acre for the farm ready for water. The average annual cost of putting water on this land is $0.74, and, using the figures given for Montana, we find that the value of the annual produce from each acre so irrigated is $12.96. Deducting from this last sum the cost of putting water on the land, and the cost of planting, harvesting and saving the crop, there is still a margin left which will pay a return upon the capital outlay mentioned sufficient to prove the

benefits of irrigation. It must also be noted in considering these figures that the cultivation of one acre by irrigation practically reclaims a large adjoining arid area, for the certainty of being able to grow a sufficient crop of fodder each year upon the irrigated area, with which to winter the cattle grazing during the summer upon the unirrigated land, brings large areas within the scope of successful cattle raising and dairy farming which would otherwise, owing to their aridity and lack of winter feed, be useless. This is probably one of the strongest features which can at the present time be advanced in support of the construction of irrigation systems in the arid portions of the Territories, for it must be remembered that the large areas of good land within the humid portions of the Territories, which are still available for free homestead by the immigrant, are situated in districts which are to a greater or less extent wooded, and, although these areas are probably unsurpassed in any country for mixed farming, they do not afford the facilities for pasturage offered by the plains country, which though spoken of as arid, receives sufficient moisture to produce annually a good crop of nutritious grass, and has the further advantage that cattle can run at large and remain unsheltered during the winter months.

The effect which irrigation has had upon land values in the United States is shown by the following extract from the Progress Report on Irrigation in the United States, by R. J. Hinton, 1891.

"One of the most interesting questions is that of land values as produced by irrigation. The nature of the products raised under this system of farming and the intensive culture which it generally demands have much to do, of course, with the large increase in the commerical value of land cultivated by this system as compared with contiguous areas and acres not "under ditch." The value of irrigation can well be tested by the evidences of profit. An examination of the evidence given by the witnesses before the United States Senate Special Committee on Irrigation and Reclamation of Arid Lands will show that in no case were the estimates of increased land values, as arising from the artificial application of water to the soil, less than $2 to $5 per acre over similar and adjacent land not "under ditch." Indeed the estimates generally run from $15 increase up to $250 per acre, and even more, for land not actually cultivated, but in a position to be made at once available by reason of its convenient access to water. These larger prices are, of course, the scale only of the semitropical or other exceptional areas, wherein fruits and special products of high marketable value are most readily produced.

"But it will be found during the development of irrigation and the cultivation of the soil thereby that the area of special products, in its relation to the whole arid region, will enlarge almost continuously until the two become synonymous in character.

"In Montana the ruling rate will be for non-irrigated land, $1.25 to $10; for irrigated, from $25 to $75 per acre. In the Gallatin Valley and some other areas favourably located, the average price will range from $100 to $200 per acre. In Idaho the ruling rate will be about the same as in Montana, and in the neighbourhood of Boisé City and some other favoured points, the values will range about as in the Gallatin Valley. In eastern Oregon the small area of irrigated land increases in value at the rate of 300 to 500 per cent. In Washington the average price of land, with water, will range from $50 to $150 per acre. Non-irrigated land, according to its accessibility to sub-irrigation or irrigation from the phreatic flow, will range from $3 to $50 per acre."

Irrigation is practically an insurance on the production of crops, and there is no doubt that the small farm well irrigated is a much more certain source of livelihood, and of possible surplus earnings, than the large farm situated in a subhumid region and subject to sporadic droughts.

The results from irrigation are largely dependent upon the intelligence and energy brought to bear in constructing the systems for the distribution of the water, and in producing crops by the application of this water to the land; successful agriculture or horticulture by the method of irrigation is as much dependent upon energy and hard work as is success in any other branch of industry, the irrigator, however, knows that his hard work will bring a sure return, and he therefore has an inducement to energy and thrift which is not experienced by the farmer who is dependent upon varying conditions of rainfall to supply the moisture needed by his growing crop, and is never sure of his harvest until the crop is cut.

Irrigation is not the panacea for all ills which some claim and expect from it, but that it will render a large portion of the arid region, now useless and unproductive, capable of supporting a dense and prosperous population is beyond argument.

THE EFFECT OF IRRIGATION ON SUMMER FROSTS.

The question of the effect which irrigation will have in increasing or decreasing the summer frosts which occur in certain portions of the arid region is one of deep interest to the residents of these districts.

At first glance it would seem that the wetting of any considerable areas of land would have the effect of cooling the atmosphere and increasing the probability of frost, for it is within the experience of many that low wet or swampy lands are very much more subject to frost than the high and dry bench land, however the data obtainable regarding the experience of certain of the states and territories in the United States upon this subject leaves no room for doubt that the application of water through irrigation has quite a contrary effect to that mentioned, and that the recurrence of summer frost has been diminished thereby.

It is not proposed here to go into a discussion of the probable reasons for this phenomenon, such discussion being deferred until data founded upon the experience in our arid region, and corroborative of that mentioned, can be quoted and the matter fully and intelligently dealt with. It will probably be sufficient at this time to state the fact that in certain of the irrigated areas in the central and northern irrigation states, much disappointment and loss were experienced in the early days of irrigation owing to summer frosts, and that in these same districts the recurrence of frosts is becoming much more rare, and crops are now successfully raised, which, owing to their susceptibility to frost, would not have been attempted by the most sanguine many years ago. It will also be of interest to note that in Southern Alberta during the past year the writer observed irrigated crops which were untouched by frost while adjoining unirrigated portions were destroyed, these remarks being equally applicable to vegetables and grain.

From a careful consideration of the facts obtainable upon this subject it may safely be assumed that among the beneficial results which will accrue to our arid areas from irrigation not least important will be the favourable influence which it will have in diminishing summer frosts.

THE EFFECT OF IRRIGATION ON HEALTH.

Among the objections urged against irrigation is that of unhealthfulness, and it will be of interest to refer briefly to the information obtainable on this important subject.

Supersaturation of the soil is unwise from the standpoint of crop produced, and the injurious effect upon the crop is readily discernible, but the influences which such excessive use of water has upon the health of those resident upon such lands is more difficult to deal with, and opinions upon the subject are somewhat conflicting.

The following statement by Dr. H. S. Orme, member of the State Board of Health of California, extracted from a text book by Mr. P. J. Flynn, will illustrate the conditions existing there.

"The effect of the irrigation of the agricultural lands, particularly in California, upon public health is one of growing importance, and inasmuch as the available evidence bearing upon the subject is somewhat contradictory, it is necessary to note the conditions of locality, with respect to soil, temperature, humidity and drainage, wherever irrigation is practised.

"Although irrigation has been carried on in California since the first establishment of the early missions by the Franciscan Fathers, more than a century ago, very little progress has been made in the scientific application of the system, the object of the cultivator being apparently only to get the water upon his land, without regard to the method employed.

"The application of the water used in irrigation varies greatly in manner, but may be described as two different methods, viz.: first, by flooding the whole surface of the land from open ditches (*Zanjas*); and second, by sub-irrigation, that is a conveyance of the water through pipes beneath the surface of the ground, which have openings at intervals, protected by upright pipes.

"So far as the effect upon health is concerned the latter method will not be considered, because of the very limited extent to which sub-irrigation is being applied.

"In the case of the application of water by *flooding* the land from open ditches, the various reports made by impartial authorities, are, in some respects, conflicting. For instance, in Los Angeles, Ventura, Santa Barbara, San Barnardino and San Diego counties, where irrigation has been carried on for over a hundred years, the testimony is strong to the point that, there is no striking difference in

the amount of malarial diseases, whether irrigation is practised or not. On the other hand, if we consult the records of some other portions of California, we find an increase of malarial fevers with the increase of irrigation too intimately connected to be overlooked. The reasons for this are not difficult to discover. In Los Angeles and other valleys in extreme Southern California, where the soil is, as a rule, sandy or gravelly loam of unknown depth, the water in irrigation either sinks into the ground, or, if there is much surface slope, immediately drains at, or near, to the surface. In such sections of country there is great freedom from malarial diseases. Along the bottom lands of rivers where the slope is insufficient to insure good drainage, or where the soil is constantly saturated, the case is different. Here there is more or less intermittent and remittent fever during the warmer season of the year. In the case of swamp or overflowed lands, especially those having a heavy adobe soil, as well as those which remain wet and boggy from the winter rains, and are in summer kept in a saturated condition by artificial means, containing also an excess of decomposing vegetable matter and many stagnant pools, malarial diseases of the most pronounced type are very prevalent. In such localities all zymotic diseases are much worse in summer than in winter, a consequence which naturally results from the high temperature and increased evaporation. The fact that the people, living in these low, wet adobe sections of country, are dependent upon impure or surface water for drinking and domestic purposes, greatly aggravates the difficulty. Indeed, it has been more than once demonstrated that people living in a "fever and ague" country are tolerably exempt from the fever if they drink only pure water.

The information obtainable upon this subject in the central and northern irrigating States is very fragmentary and incomplete, but it indicates that as yet no noticeable injurious influence upon health has been caused by irrigation, and it is probable that the few instances where complaints are made under this head are attributable to some local influences which must be excluded in discussing the question from a general standpoint.

In the absence of careful statistics, extending over a considerable period of time and covering different climatic conditions, it is impossible to advance any general statement on this subject which would apply equally to irrigable areas as widely separated in distance and climate as Alberta and California, but it may be assumed that had irrigation had the marked effect upon the health of communities which some persons claim, the matter would have received public attention, and information in relation thereto would be available: however, the matter is one deserving of serious consideration, and, as irrigation increases, there is little doubt that it will receive that attention which its importance warrants.

REPORT OF MR. J. S. DENNIS, CHIEF INSPECTOR OF SURVEYS, ON IRRIGATION OPERATIONS DURING THE SEASON OF 1895.

CALGARY, Alta., 31st October, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the following report upon the work of the Irrigation Office at this point, from its establishment in May last up to date.

Before leaving headquarters in the spring to begin the season's irrigation surveys, I received your instructions to open this office on my arrival here, and to establish, under a definite system, the administration of the provisions of the North-west Irrigation Act, which had been carried on by me during the previous year in a general way in connection with my other duties.

I left Ottawa on the 16th May and immediately on my arrival in Calgary I opened my office in a vacant room in the Government block which I had occupied during the previous season, and made it known that I was prepared to deal with applications for water rights under the Irrigation Act and the amendments thereto of last session. The wisdom of establishing the office at once became apparent from the large number of applications received, and the numerous inquiries made regarding the necessary procedure to be followed in applying for water rights. It was also plain that the amendments to the Act which had been passed at the last session, by which the procedure to be followed in procuring licenses for irrigation systems designed to carry less than 10 cubic feet of water per second was greatly simplified, was a move in the right direction, as the numerous complaints which had been made regarding the original provisions of the Act in this behalf were immediately silenced by the inauguration of the simple routine necessary to be followed by those who desired to obtain licenses for systems of this character. The ability to satisfy these complaints was also largely aided by the provisions of the amending Act regarding the examination and completion of the returns in this office before deposit with the agent of the department, thus doing away with the delay which naturally resulted from the returns being fyled before being examined, and then having to be sent backwards and forwards through the mail for the completion of the necessary corrections.

It was also apparent that a desirable change had been made by the amending Act in substituting the agent of Dominion lands for the different districts in which the irrigation was undertaken, for the registrars who had been charged in the original Act with the duty of recording applications. The deposit of applications with the land agents permits of amendment in the procedure of registration, and in connection with the procuring of information regarding the title to lands affected by applications, which has greatly assisted the work, and also materially cheapens the cost to the applicant, owing to the fact that the fees which it was proposed to charge for the deposit and record of applications in the Registry office have been done away with.

Immediately after completing arrangements for the season's field work of the irrigation surveys and getting the parties to work, I paid a visit to the North Fork of Sheep river where a number of ditches had been constructed, the proprietors of which had petitioned the Minister regarding the cost of registration. Having arranged for a general meeting of the parties interested, I was able to satisfy them of the desirability of recording their ditches, and of the desire of the department to simplify and cheapen the procedure of procuring the necessary license, and as a result they immediately proceeded with the necessary surveys, and shortly after I was able to put through all their applications, some fourteen in number, for water rights from this stream.

During the season I have also made numerous visits to other points where irrigation work was going on for the purpose of making the necessary inspections, and to examine into and report upon disputes which have arisen regarding the diversion and use of water, special reports dealing with each case having been forwarded from time to time.

Since opening the office the work has steadily increased, and has now assumed rather large proportions, as will be readily seen from the following statement:—

Number of letters received	907
Number of letters sent	966
Number of special reports	14
Number of plans (in duplicate) examined and recorded	68
Number of memorials examined and recorded	73
Number of forms prepared and issued	1000
Number of certificates for licenses issued	25
Number of abstracts of title of lands affected by applications prepared	55
Number of affidavits taken	102
Number of priorities schedules, with necessary evidence prepared and forwarded	21
Number of disputes regarding water rights examined into and reported on	5
Number of plans or sketches to illustrate reports prepared	4

In connection with the work outlined by the above statement I would point out that the figures convey a faint idea of the amount of work entailed in putting through the applications mentioned. This fact will be more fully realized when I state that the returns filed in connection with applications for water rights consist of a general plan showing the location of the proposed works, and also of profiles of the proposed location, with the necessary details of the structures to be erected in connection therewith, accompanied by specifications; in each case these plans have to be carefully examined, not only to see that they contain the information called for by the Irrigation Act, but also that the structure proposed to be erected provides for public safety, and the many engineering questions involved in the criticism of these structures necessitates a very careful checking of detai's and of the kind and size of the proposed materials, with resultant strains, loads, &c. It is also necessary after completing this examination to make a second examination to see that the omissions pointed out in the first instance have been properly supplied by the engineer or surveyor, so that, in fact, to a certain extent, the returns receive a double examination in this office before being certified.

The preparation of the abstracts of the title to land affected by the proposed irrigation systems is also a work of considerable magnitude, and it necessitates correspondence, not only with the department, but with the different registrars, and the Canadian Pacific and Calgary and Edmonton Railway Companies relative to lands, the title to which has passed from the Crown to the railway companies, or to owners other than those shown by the plans fyled in connection with the applications.

The procuring of the necessary evidence to show the priorities held by the different ditches which were constructed before the passing of the Irrigation Act, so that they may be properly set out upon the priorities schedules for the different streams, has involved a good deal of work, and some considerable trouble in finding the persons who could give the best evidence upon the points involved.

Speaking generally of the work of the office, I may say that, combined as it has been with supervision of the irrigation surveys, and a certain amount of work in connection with our ordinary land and trail surveys, it has involved long hours and constant application to keep it up, but as this work and application have resulted in getting the office upon a good basis and the work established upon a well formulated plan of routine, I am in hopes that in the future we will be able to keep up with the requirements of the service, with the staff available, by working during somewhat more reasonable hours.

Before proceeding to any discussion of the results of irrigation development during the past season, I give herewith a schedule of the water rights applied for, and also the ditches constructed and in operation, or under construction, for which applications have not yet been made.

SCHEDULE OF WATER RIGHTS applied for in accordance with the provisions of the North-west Irrigation Act, and also of Ditches constructed for which application has not yet been made.

Number.	NAME.	PURPOSE.	SOURCE OF SUPPLY.	LOCATION OF INTAKE.					Length of Ditch in Miles.	Quantity of water in cubic feet per second.	Area to be Irrigated, in Acres.	REMARKS.
				Part.	Sec.	Tp.	Rge.	Mer.				
1	The Calgary Irrigation Co.	Irrigation.	Elbow River	S.E.	4	24	4	5	61·00	450·00	45,400	
2	The Calgary Hydraulic Co	do	Bow River	S.W.	4	25	2	5	6·00	25·00	2,500	
3	A. E. Botterel	do	Dog Pound Creek	S.E.	21	28	4	5	1·00	·8	80	
4	British American Ranch Co.	do	Big Hills Creek	S.E.	10	26	4	5	1·50	·68	68·4	
5	Cochrane Ranche Co	do	Belly River	.....	6	5	26	4	2·00	2·00	200	
6	T. B. H. Cochrane	do	Big Hills Creek	N.W.	11	26	4	5	3·00	8·00	800	
7	Annie Dowling	do	S. Fork, Fish Creek	N.E.	4	22	3	5	1·00	1 10	110	
8	J. H. Ellis	do	Elbow River	S.E.	14	24	4	5	·75	1·10	110	
9	Charles Flint	do	N. Fork, Fish Creek	N.E.	21	22	3	5	1·25	1·20	120	
10	Glen Estate	do	Fish Creek	N.E.	4	23	1	5	1·00	1·30	130	
11	W. R. Hull	do	do	S.E.	35	22	1	5	1·00	5·00	500	
12	R. E. C. Hooper	do	Elbow River	N.E.	9	24	3	5	1·25	1·70	170	
13	Robert Hamilton	do	Sheep River	N.E.	24	20	29	4	2·50	1·25	125	
14	W. R. Moseley	do	N. Fork, Fish Creek	N.W.	21	22	3	5	1·00	1·30	130	
15	J. W. Ockley	do	S. do	N.E.	10	22	3	5	·75	1·10	110	
16	Charles Priddis	do	N. do	N.E.	21	22	3	5	2·00	1·30	130	
17	Geo. F. Russell	do	Pot Hole Creek	N.E.	17	7	21	4	1·00	·80	80	
18	Springbank Irrigation District	do	Elbow River	S.E.	4	24	4	5	36·00	212·00	21,200	
19	do do	do	Jumping Pound Creek	S.E.	13	24	5	5	42·00	307·76	30,776	
20	W. R. Hull	do	Bow River	S.E.	12	23	1	5	3·00	8·00	800	
21	Addison Hone	do	N. Fork, Fish Creek	N.W.	21	22	3	5	·50	·40	40	
22	George T. Young	do	S. do	N.W.	3	22	3	5	1·00	3·10	310	
23	M. Gardner	do	Tributary of the Elbow River	N.E.	12	24	4	5	2·00	3·60	360	
24	C. Spalding	do	High River	N.W.	29	18	29	4	1·50	1·30	130	
25	R. Walsh, sr., and R. Walsh, jr.	do	Beaver Dam Creek	S.W.	36	28	3	5	2·00	2·58	258	
26	R. C. Inglis	do	do	S.E.	17	28	3	5	1·00	1·05	105	
27	W. R. Hull	do	Mosquito Creek	S. ½	15	25	29	4	1·00	1·05	105	
28	Shaw, Kinnaird & Co	Domestic.	Fish Creek	N.E.	4	23	1	5	.....	·0077	.....	5,000 galls. per 24 hours
29	W. B. Irving & W. D. Kerfoot	Irrigation.	Coal Creek	S.W.	34	27	5	5	4·50	5·80	580	
30	H. W. C. Meyer and others	do	Sheep River	N.W.	25	20	1	5	14·00	50·00	5,000	
31	M. Shea and B. Madden	do	Beaver Dam Creek	S.E.	21	28	3	5	2·25	2·49	249	
32	Ricardo & Bevan	do	Bow River	N.W.	17	22	29	4	3·00	2·50	250	
33	W. R. Hull	Domestic.	Elbow River	S.W.	14	24	1	5	.....	·038	.....	25,000 do
34	Canadian Pacific Railway Co.	do	Moose Jaw Creek	S.W.	33	16	26	2	.....	·154	.....	100,000 do
35	do do	do	Swift Current Creek	S.W.	25	16	12	3	.....	·038	.....	25,000 do
36	do do	do	do	N.W.	19	15	13	3	.....	·116	.....	75,000 do

37	do	do	do	*Pie-a-pot Creek*	N.W.	8	12	23	3		·045		30,000	do
38	do	do	do	Ross Creek	N.W.	31	11	2	4		·030		20,000	do
39	do	do	do	South Saskatchewan River	N.E.	31	12	5	4		·154		100,000	do
40	do	do	do	Bow River	*	*	*	*	*		·092		60,000	do
41	do	do	do	Elbow River	S.W.	14	24	1	5		·060		40,000	do
42	do	do	do	Bow River	S.W.	18	26	4	5		·045		30,000	do
43	do	do	do	do	N.W.	30	24	8	5		·045		30,000	do
44	do	do	do	Forty-Mile Creek	S.E.	2	26	12	5		·030		20,000	do
45	do	do	do	Bow River	N.E.	28	28	16	5		·045		30,000	do
46	do	do	do	North Antler Creek	N.W.	33	2	30	1		·030		20,000	do
47	do	do	do	Moose Mountain Creek	S.W.	33	3	2	2		·030		20,000	do
48	do	do	do	Souris River	N.E.	30	1	6	2		·045		30,000	do
49	do	do	do	do	S.E.	20	8	14	2		·030		20,000	do
50	do	do	do	Boggy Creek	N.W.	26	19	21	2		·015		10,000	do
51	do	do	do	South Saskatchewan River	N.W.	28	36	5	3		·015		10,000	do
52	do	do	do	McFarland's Creek	N.E.	13	46	1	3		·007		5,000	do
53	do	do	do	Seven Persons Coulee	S.E.	4	11	7	4		·015		10,000	do
54	do	do	do	Belly River	N.W.	7	10	16	4		·030		20,000	do
55	do	do	do	Battle River	S.W.	4	43	25	4		·015		10,000	do
56	Glengarry Ranch Co		Irrigation	Trout Creek	N.W.	26	12	29	4	2·25	4·73	473		
57	Findlay, McDougall and others		do	High River	N.W.	30	18	29	4	8·00	54·00	5,400		
58	Alberta Railway and Coal Co		Domestic	Belly River	S.W.	1	9	22	4		·154		100,000	do
59	do	do	do	Milk River			2	16	4		·030		20,000	do
60	E. O. and Geo. A. Reid		Irrigation	Dog Pound Creek	N.W.	20	28	4	5	1·00	1·14	114		
61	William Edgar		do	Fish Creek	N.W.	26	22	3	5	·50	·82	82		
62	John Quirk		do	N. Fork, Sheep River	S.W.	5	21	4	5	2·50	·35	350		
63	do		do	do	S.E.	33	20	4	5	1·00	1·34	134		
64	Robert Turner		do	do	N.W.	3	21	3	5	1·50	1·45	145		
65	J. W. McLaughlin		do	High River	S.E.	33	18	29	4	3·50	6·80	680		
66	E. G. May		do	Elbow River	S.W.	8	24	2	5	·70	1·03	103		
67	W. W. Stuart		do	Jumping Pound Creek	N.W.	19	24	4	5	1·00	·60	60		
68	Calgary Gas and Water Works Co		Other purposes	Bow River							20·00			
69	H. S. Lott		Irrigation	Elbow River	N.W.	6	24	2	5	1·25	3·60	360		
70	E. H. O. Vaudin		do	do	S.W.	3	24	4	5	1·25	2·00	200		
71	P. Lachance and others		do	Belly River	N.E.	14	8	25	4	3·50	19·40	1,940		
72	Janie Broderick		do	Little Bow River	N.W.	20	18	28	4	1·00	1·58	158		
73	H. D. Graves		do	Dog Pound Creek	S.E.	22	30	3	5	1·50	·95	95		
74	M. T. Millar		do	N. Fork, Sheep River	N.W.	2	21	3	5	·75	1·65	165		
75	S. Livingstone		do	Elbow River			23	2	5	4·00	4·96	496		
76	Fraser & McKinnon		do	N. Fork, Sheep River	N.W.	7	21	2	5	1·00	3·15	315		
77	George Bell		do	do	N.E.	31	20	3	5	·75	1·00	100		
78	James Aird		do	do	N.E.	4	21	3	5	·75	1·10	110		
79	A. C. Newson		do	Spring Creek in 21-3-5	S.W.	35	21	3	5	·75	2·40	240		
80	G. Anderson, sr		do	N. Fork, Sheep River	N.E.	4	21	3	5	·50	·20	20		
81	G. Anderson, jr		do	do	S.E.	8	21	3	5	·50	·80	80		
82	Joseph Waite		do	do	N.E.	23	20	4	5	1·50	1·20	120		
83	Alex. Aird		do	do	N.E.	23	20	4	5	2·00	1·05	105		
84	Joseph Fisher		do	do	N.W.	1	21	3	5	2·00	3·75	375		
85	Arthur Shead		do	Old Man River	S.W.	14	9	26	4	1·00	·60	60		
86	James McDonough		do	High River	S.W.	25	18	1	5	2·00	2·63	263		

SCHEDULE OF WATER RIGHTS applied for, &c.—*Concluded.*

Number.	NAME.	PURPOSE.	SOURCE OF SUPPLY.	LOCATION OF INTAKE.					Length of Ditch in Miles.	Quantity of water in cubic feet per second.	Area to be Irrigated, in Acres.	REMARKS.
				Part.	Sec.	Tp.	Rge.	Mer.				
87	Calgary Water Power Co	Domestic	Bow River, Calgary	S.W.	22	24	1	5	.....	.....	.....	To cover rights held under Ordnance of 23rd Oct., 1890, and 53 Vic., c. 95.
88	Eau Claire & Bow River Lumber Co	do	Bow River	S.W.	22	24	1	5	.....	1·00	.....	
89	Henry Sinnott	Irrigation	Middle Fork, Sheep River	N.W.	21	20	4	5	·75	·32	32	
90	Joseph W. Short	do	High River	N.E.	30	18	29	4	3·00	3·95	395	
91	Quorn Ranch, receivers of	do	Sheep River	S.W.	22	20	2	5	4·00	15·05	1,505	
92	Bow River Horse Ranch	do	Jumping Pound Creek	N.W.	33	25	4	5	2·00	2·40	240	
93	Leeds, Elliott & Co	do	Willow Creek	N.W.	1	13	28	4	3·00	2·40	240	
94	George Hauk	do	St. Mary River	S.W.	25	7	22	4	·50	1·60	160	Application not complete
95	C. D. McK. Blunt	do	High River	S.W.	23	18	1	5	5·00	9·60	960	

* Blackfoot Indian Reserve.

DITCHES constructed and in operation, for which application has not yet been made.

Number.	NAME.	ADDRESS.	SOURCE OF SUPPLY.	LOCATION OF INTAKE.					Length of Ditch in Miles.	Quantity of water in cubic feet per second.	Area to be Irrigated, in Acres.	REMARKS.
				Part.	Sec.	Tp.	Rge.	Mer.				
1	H. H. Fauquier	Maple Creek	Hay Creek	S.W.	29	10	25	3	·5	1·50	150	
2	C. W. Elton	Livingstone	Todd Creed	S. E.	19	8	·1	5	1·0	·80	80	Surveyed and application about to be made.
3	Sheep Creek Irrigation Co.	Dewdney	Sheep River	E. ½	25	20	2	5	6·0	10·00	1,000	do do
4	Austin & Matheson	do	do	N.E.	35	20	2	5	1·0	1·20	120	do do
5	Jean Claustre	Maple Creek	Pie-a-pot Creek	S.W.	19	20	24	3	1·0	3·00	300	
6	Maunsell Bros	Macleod	Old Man River	N.E.	35	8	27	4	2·00	5·00	500	
7	Wm. Maloney	Calgary	Bow River	E. ½	26	23	1	5	2·00	3·00	300	
8	R. N. Newbolt	do	do	NW.	34	21	28	4	1·28	1·50	150	
9	R. A. Wallace (Isaac Potter ditch).	High River	High River	W. ½	1	19	29	4	5·00	10·00	1,000	do do
10	W. Durban	Springbank	Creek in Tp. 24, R. 3, W. 5	S.W.	18	24	3	5	·60	1·00	100	
11	W. Skrine	High River	Mosquito Creek	S.W.	8	16	1	5	·25	·60	60	
12	Alex. Lucas	Calgary	Elbow River	N.E.	5	24	2	5	1·70	1·00	100	do do
13	Geo. Patterson	do	Creek in Tp. 21, R. 3, W. 5	S.W.	32	21	3	5	·68	1·75	175	
14	Geo. Lane	High River	Kuntz Creek	N.W.	11	14	30	4	3·00	3·00	300	
15	A. E. Bannister	Davisburg	Bow River	N.E.	7	22	28	4	1·67	1·50	150	
16	C. C. Short	High River	High River	S.W.	34	18	29	4	1·00	1·20	120	
17	J. R. Davis	Lethbridge	Etzi-kom Coulee		31	6	19	4		1·00	100	
18	John Lineham	Dewdney	Creek in Tp. 20, R. 2, W. 5			20	2	5	·30	1·00	100	
19	Nelson Bibo	Calgary	Spring adj'ing Fish Creek	N. ½	5	23	1	5	·49	1·00	100	
20	Samuel Howe	Dewdney	McAbee Creek		31	19	3	5	1·50	1·00	100	
21	J. L. Johnston	Calgary	Rosebud River	S.W.	14	27	24	4	·05	2·00	200	Suv'd, ap. being completed
22	Thomas Behan	do	Elbow River	N.E.	5	24	2	5	50	1·00	100	Surveyed and application
23	C. O. Card and others	Cardston	Lees Creek	S. E.	5	3	25	4	4·00	8·00	800	about to be made.
24	John A. Nelson	do	do		36	2	26	4		·40	40	
25	North-west Mounted Police	Stand Off	Waterton River	N.W.	28	6	25	4	1·75	1·60	160	do do
26	W. Payne	Mountain View	Mahmee Creek	N.W.	12	2	28	4		·35	35	
27	W. G. Glennie	Maple Creek	Pie-a-pot Creek	N.E.	7	10	24	3	·50	1·00	100	
28	Indian Department	Blackfoot Indian Res.	Bow River	*	*	*	*	*	4·00	12·00	1,200	do do
29	Alfred Lloyd	Maple Creek	Pie-a-pot Creek	S.W.	20	10	23	3	1·00	·30	30	
30	Colin Gouge	Macleod	Willow Creek	N.W.	24	9	26	4		1·75	175	Application made, not yet complete.
31	John Nelson	Livingston	Old Man River	S.W.	27	8	1	5	1·50	·80	80	Surveyed and application
32	F. S. Blake	do	Tributary to Old Man Riv									about to be made.
33	J. C. Warren	Millarville	do Sheep River.	N. E.	24	21	3	5				
34	F. A. Jackson	do	do do	N. E.	26	21	3	5				
35	Peter Allen	Mountain View	Belly River		35	2	28	4	1 00			

DITCHES constructed and in operation, for which application has not yet been made.—*Concluded.*

Number.	NAME.	ADDRESS.	SOURCE OF SUPPLY.	LOCATION OF INTAKE.					Length of Ditch in Miles.	Quantity of water in cubic feet per second.	Area to be Irrigated, in Acres.	REMARKS.
				Part.	Sec.	Tp.	Rge.	Mer.				
36	John Furman	Cardston	Lake in Sec. 28, Tp. 1. R. 26, W. 4 M.	S. ½	28	1	26	4	1·25	1·00	100	
37	D. G. Hackney	Priddis	Tributary of Sheep Riv.	S. E.	24	21	3	5				
38	W. C. Wills	Palliser, B.C.	Creek in Tp. 27, R. 6, W. 5 M.			27	6	5	5·00	10·00	1,000	
39	J. Sibbald	Jumping Pound	Jumping Pound Creek	N.W.	12	24	7	5				
40	D. H. Cox	Mountain View	Lake in Secs. 4 & 9, Tp. 2, R. 29-4		4	2	29	4	2·00	4·00	400	
41	E. A. Elton	Pincher Creek	Todd Creek	S. E.	36	8	2	4	·50	·80	80	Surveyed and application being prepared.
42	J. Hammer and others	Cardston	Lee Creek	S.W.	9	3	25	4	·50	·40	40	
43	W. Braniff	Maple Creek	Bear Creek	N.E.	30	11	23	3				
44	Jones & Co	Swift Current	South Saskatchewan Riv.									
45	John Heron	Pincher Creek	Pincher Creek	S. E.	22	6	30	4	2.00	10·00	1,000	
46	John Kemmis	Livingstone	Todd Creek	S. E.	26	8	2	5	1·50	·70	70	Surveyed and application being completed.
47	W. H. Lees	Pincher Creek	Mill Creek	N.E.	34	7	2	5	·50	·50	50	do do
48	R. H. Burn	do	Spring Ck. Tp. 7, R. 2, W. 5	S.W.	34	7	2	5	·60	·50	50	do do
49	R. A. Davis	do	do do	S.W.	34	7	2	5	·75	·80	80	do do
50	H. G. Burn	do	do do	S.W.	34	7	2	5	·50	·60	60	do do
51	W. M. Green	do	Todd Creek	S.W.	12	9	2	5	·25	·70	70	do do
52	John Ware	Millarville	Sheep River	S. E.	27	20	4	5	1·70	1·00	100	do do
53	North-west Mounted Police	Colles	Spring on Tp. 2, R. 24, W. 4	S.W.	20	2	24	4	·50	·25	25	do do

* Blackfoot Reserve.

The information contained in the schedule with regard to irrigation proper will be more readily appreciated from the following condensed statement:

Total number of ditches constructed in Alberta and Assiniboia	120
Total mileage of main ditches	330·67
Acreage of area susceptible of irrigation from constructed ditches	131,391
Approximate cost of construction of completed ditches	$ 104,000

From the above schedule it will be seen that the number of ditches in operation in Southern Alberta and Assiniboia is 120, for 67 of which applications have been made for licenses in accordance with the provisions of the Act; application for the remainder will probably be made within a short period, a number of them having been properly surveyed, and the returns in connection therewith now being in course of preparation.

During the present month, with your concurrence, I sent out a short form to each ditch owner, in which I have asked them to state in condensed form the results of their season's operations. After receiving their replies I purpose summarising this information in the shape of a concise bulletin, so that it may be issued to all, and thus give each the benefit of the others' experience in the matter of crops raised, and dates and periods of irrigation. I am of opinion that the progress of irrigation will be materially assisted by the dissemination of literature of this kind.

The season in Southern Alberta has not been a favourable one for irrigation, the weather having been particularly cold and wet, and although the growth has been very marked, the crops did not ripen and were to a great extent damaged by early frosts. However, as the larger number of those at present owning ditches utilize them more particularly for the growth of fodder crops, the results from the standpoint of feed have been fairly satisfactory, and there is every indication that the construction of many additional ditches will be undertaken during this fall and the coming spring. Those who have practised irrigation during the past season are satisfied with the results, and the people of the district generally seem to recognise the fact that irrigation has now advanced beyond the experimental stage, and, when combined with stock raising, permits of a certainty of fodder crops, which does away with the possible loss of cattle during a hard winter owing to want of feed.

Our season's irrigation surveys have been of a satisfactory character. I have made them the subject of the usual report to the Surveyor General; but owing to the fact that our field work is only just closed, it has been impossible to do more than outline, in a very general way, the results of the work. However, our investigations have added very largely to our previous knowledge of the topography and hydrography of the arid region, and will permit of the issue of a detailed report so soon as the necessary plans and schedules showing this information have been prepared.

We have also completed during the past season the preliminary location of two irrigation canals, the first heading in the St. Mary river, and designed to supply water from that stream for the reclamation of areas to the south and east of Lethbridge, and the second, or Bow river irrigation canal, is intended to take water from the Bow river, in the vicinity of this city, for use upon the areas adjoining the Canadian Pacific Railway to the east, which are now unproductive owing to want of moisture. The necessary plans and profiles showing the proposed location and means of constructing these canals, with the details of the structures, are now in course of preparation, and upon their completion the undertakings will be made the matter of special report. I may, however, briefly say in connection therewith that these two surveys demonstrate the possibility of utilizing large volumes of water from both these streams for the irrigation of extensive areas under very favourable conditions as to financial cost. In the case of the Bow river canal, our survey and location has proved that the total available supply of water from this stream can be diverted to the high plateau, or bench land district, traversed by the Canadian Pacific Railway between this point and Medicine Hat, and the location offers an opportunity for the construction of the main canal with an absence

of flumes or other perishable structures, which is met with in very few of the large irrigation canals on this continent.

By the middle of August it had become apparent that this office could not be closed during the winter months, as the work was increasing so fast that it would be unwise to allow it to accumulate for any lengthy period. The provisions of the amendments to the Irrigation Act passed at the last session also necessitated the keeping open of the office during the entire year, as these amendments made it a condition of applications for water rights that the memorials and plans to be fyled in connection with such applications should be first submitted for examination and approval in this office before being fyled with the agent and the department. It was also evident that the construction of irrigation systems for which application had been made would continue until late into the fall months and commence again early in the spring.

In view of these facts I submitted a proposal to you for the transfer of my headquarters from Ottawa to this city, and, the proposed arrangement having been approved by the Minister and yourself, I completed the transfer during the present month.

This transfer involves some inconveniences from a personal standpoint incident to a change from the conveniences of a city like Ottawa to a new western point like Calgary, with a considerable addition to the cost of living; but it is certain that the work of the office will be materially benefited by the change, and my being on the ground up to the time the streams freeze up, and again in the spring when they first open up, will permit of investigations regarding their discharge being undertaken at these dates which have not been possible under conditions which involved my leaving here early in the fall and not returning until the spring was well advanced.

Late in August I was notified of my having been appointed one of the delegates to represent Canada, with yourself and Mr. Superintendent Pearce, at the fourth International Irrigation Congress at Albuquerque, New Mexico.

In company with Mr. Pearce I left here on the 7th September and proceeded to St. Paul, where we joined you, and from thence we travelled to Albuquerque, via Colorado, where we spent two days examining irrigation canals, reservoirs and other works, and the results of irrigation, and also in meeting some of the representative irrigation engineers and irrigators of the state.

At Albuquerque we were in attendance at the sessions of the congress until the evening of the 19th September when we left for home via Arizona and the Pacific Coast, reaching Calgary on the morning of the 28th September.

The information obtained during the sessions of the congress and from our visits to the different irrigation centres will be of value in dealing with this important subject in our territories. I was also able during the annual meeting of the American Society of Irrigation Engineers, which was held at Albuquerque at the same time as the congress, to consult some of the leading members of the society regarding engineering points which had arisen in our location of the St. Mary and Bow river irrigation canals.

During the progress of the congress I submitted a paper on the subject of our irrigation law and its administration, and as this paper contains, in concise form, much information which is new to those in Canada who are unacquainted with the subject of irrigation or our irrigation law, I insert it here, as the most ready method of setting forth the facts on this subject which I had intended incorporating in this report.

Canadian Irrigation Laws and their Administration.

Paper read at the Fourth International Irrigation Congress, Albuquerque, New Mexico, 18th September, 1895.

"The use of water for irrigation has been a fruitful subject in the enactment of laws regarding its use and diversion, from the earliest periods of history down to the present time, and among the latest of these laws is that enacted by Canada last year. The laws on this subject in the different irrigable States and Territories in the United States of themselves constitute quite a library, and if we add the laws of other coun-

tries in the central portion of this continent, and of those European and eastern countries where irrigation is practised, together with the Australian and New Zealand enactments on the subject, the student of this branch of law will find abundant material for study in the wide range of differences presented, and in the many and complex questions which have arisen in their administration.

" Irrigation is practically a new principle in Canada, and we had therefore little or nothing in the shape of actual local experience to guide us in the framing of the law under which water is to be used in this manner. This absence of experience based on vested rights or legal rulings on the subject has, however, added greatly to the opportunity when framing our law of the inception of the principle of providing for a just first distribution of the available water supply, and subsequent supervision of its use by Government officials so as to prevent, as far as possible, the many complications arising from needless, and, in some cases, almost endless litigation.

" The federal law in Canada on this subject is contained in an Act entitled the North-west Irrigation Act, passed during the session of Parliament of 1894, having been amended in some particulars during the session of 1895. As this Act is probably the latest addition to the irrigation literature of this continent and contains some points which distinguish it from the other laws above mentioned, it is possible that some notes regarding its conditions and the administration of its provisions may be of interest to this congress, which is, I understand, concerned in the question of the advancement of all matters which are likely to add to the prosperity of those who look to irrigation as the means of making agriculture successful.

" The foundation principle in the North-west Irrigation Act is the suppression of all riparian rights in the waters which are to be used for irrigation, and the declaration that the Crown, having assumed complete ownership of the water, is bound to so administer its diversion, distribution and use, as to secure the greatest benefit to the greatest number.

" In the arid portion of our territories all the land except that granted as subsidies to aid in the construction of railways, and that alienated from the Crown in homestead and pre-emption grants and sales, and the five per cent reserved by the Hudson's Bay Company as part of the purchase price of their charter rights in the country, still belongs to the Crown, and the vesting of the water rights in the Crown under the Irrigation Act has permitted a combined administration of the land and water by the same authority, which is sure to be productive of the best results, and should prevent the clash of interests which has arisen in other countries where the land and water are owned or administered by different governing bodies.

" When the North-west Irrigation Act was passed, there were very few irrigation systems in operation, and having provided that these ditches and other vested rights in the streams should have a first right to water from the stream in which they head in the order of the date of their construction, provided that these rights were registered in accordance with the provisions of the Act within a time fixed by the Act, it was possible to outline a scheme for the granting of rights to subsequent ditch or canal constructors, which would provide for stability of title, and also prevent to a great extent disputes between those entitled to water from any particular source.

" It will probably conduce to a proper understanding of the law itself and the remarks regarding its provisions given further on, to first outline the steps to be taken under the provisions of our Act and administrative regulations by any individual or company desiring to obtain authority to construct an irrigation ditch, canal or reservoir, and to secure a water right from any source for the supply needed by such system.

" The Act recognizes the use of water under three heads, viz. : First, domestic purposes, which is construed to mean household and sanitary purposes and the watering of stock, and all purposes connected with the working of railways or factories by steam, but not the sale or barter of water for such purposes ; second, irrigation purposes ; and third, other purposes. Applicants for water under these heads have priority in the order of the dates of their applications. The rights of those using water under these heads before the passage of the Act having been recognized and provided for, subject to the registration of these rights within a given time, the Act then recognizes the principle that

prior appropriation and beneficial use of water constitutes the better title thereto. We endeavour to prevent dispute as to the date of appropriation by providing that water cannot be diverted from the stream for any of the above purposes without an application having been fyled and permission granted therefor. The procedure in acquiring this permission is as follows :—

" The individual or company desiring to construct an irrigation ditch or canal and to receive a water right therefor, or to divert water for any purposes coming within the term 'domestic purposes' or 'other purposes,' fyles with an official of the government, who has an office in the central part of the arid region, a memorial and public notice in duplicate, prepared on forms supplied. In the case of irrigation ditches or canals this memorial is accompanied by a general plan showing the proposed point of intake for the ditch, its approximate location and the lands to be irrigated, together with the names of the owners of these lands, and also a general plan of details showing the headgates, flumes, dams or other structures proposed to be erected in connection with this system, these plans being prepared in accordance with a manual of instructions issued for the guidance of those desiring to construct systems. This information is supplemented in the cases of ditches designed to carry more than 25 second feet of water by a profile of the proposed line of ditch, and a specification showing the manner of erecting structures and the materials to be used.

" These documents and plans are examined by the inspector, and if he finds that they have been prepared in accordance with and contain the information required by the Act and regulations, he stamps them with a certificate to that effect, and returns one copy to the applicant, to be by him deposited in the office of the land agent for the district within which the land and water is situated, so that the public may have access to them, the other copy being forwarded to the government for record and for their guidance in dealing with the application. The form of notice with the approval of the inspector endorsed thereon is also returned to the applicant to be inserted for five weekly insertions in some local paper named by the agent, this notice in the cases of ditches intended to carry more than 25 cubic feet per second being also published in the *Canada Gazette*, the official government publication, and also for a longer period in the local paper than is required for smaller systems.

" During the month, or longer period as the case may be, that the notices are being published, any protests that there may be against the granting of the rights applied for, are filed with the Minister of the Interior, and these protests are considered by the minister before the necessary authorization for the construction of the scheme is issued. Before the authority to construct is granted, however, a report is submitted by the inspector, showing whether there is unappropriated water available for the proposed undertaking, and also as to any necessary amendments in proposed structures, etc., to ensure public safety. All these features having been considered, permission to go on with the construction of the system is granted, or refused as the case may be. If granted, a certain time is fixed within which the proposed works must be completed, and if construction is not carried on with reasonable promptness, the rights granted lapse, and authority for the construction of the portion of the works unfinished at the expiration of the time limit fixed, also lapses.

" Authority having been obtained the applicant goes on and constructs the ditch, canal or other works on the route, in accordance with the plan and memorial filed, and when they are completed and in operation an inspection is made, and a certificate issued by the inspector, upon which the license is granted.

" Before the license is issued, however, the inspector obtains an abstract from the records of the Land and Registry Offices to prove that the lands to be irrigated are the property of or controlled by the applicant, and that he has acquired right of way for the ditch or canal across lands which do not belong to him.

" In connection with the question of right of way, the law provides that any lands may be taken for that purpose, but the ditch owner has to have a careful survey made by a duly commissioned Dominion land Surveyor of the area to be taken, these surveys being performed and plans and books of reference showing the same prepared in accordance with instructions contained in a manual issued by the government. In the

event of dispute as to the value of lands taken for right of way, the law provides for arbitration in such a manner that all interests receive proper consideration. Free right of way for ditches, canals or reservoirs, is granted across all Crown lands."

"All these steps having been taken by the applicant, the inspector makes an inspection to prove the system to have been constructed on the location and in accordance with the memorial and plans fyled, and that the area for which water is asked can be irrigated from ditches as constructed. He then issues a certificate, and a license is granted in form shown in regulations in the name of the applicant for a definite quantity of water for use under any of the three heads recognized by the Act, viz.: domestic, irrigation, and other purposes, through the system as shown by the plans and documents fyled.

"The steps outlined above as necessary to be followed by any individual or company seeking authority to use water for any of the purposes recognized by the Act may seem rather complicated or unreasonably stringent to those who have been accustomed to a law which simply provides for the use of water for irrigation, leaving it to the individual or company to appropriate the water without reference to the rights of prior ditch constructors or users of water, and to the courts to decide as to the standing of these rights; but when the title to the water, which is acquired under our Act, is understood, and the protection which the holder of this title receives in the exercise of these rights, free of charge, is understood, it will I think be admitted that the trouble and expense involved in acquiring this title is well expended. To aid in a due appreciation of these facts it is necessary to refer briefly to the title for water acquired under our laws, and the steps taken to prevent disputes between the holders of these titles, these remarks being summarized under the head

TITLE TO WATER.

"Immediately after the enactment of our law, steps were taken to determine the rights which existed to the use of water from any source for any of the purposes recognized by the Act and by an inspection of the works using water, and by establishment of their priority of right by sworn evidence. These facts having been determined, a "Priorities Schedule" for each stream has been prepared showing the extent and order of these rights, and licenses therefor are issued in the order shown in this schedule. Having thus protected the vested interests, we are ready to proceed with the granting of applications for water from these sources in the order of their receipt as provided by the Act; but before doing so we have endeavoured to obtain some reliable data as to the supply available by careful gaugings, and by opening a kind of debtor and creditor register for each stream, in which we show under credit head the available low-water, high-water and flood discharge of the stream, and under the debtor head we charge first the rights and amounts of water as shown by the priorities schedule in their proper order, and then the subsequent applications in their order as granted, and when we find that the rights granted for water during low water flow are sufficient to appropriate all this flow, with the amount which it is necessary should be left in the stream under the provisions of the law to provide for the domestic rights of those residing along the stream, we cease granting applications for the construction of ditches to divert water at this stage of the stream, and only grant permission to construct ditches to take water during the period of high water flow or flood water discharge, respectively, all these stages of water being marked by gauge rods placed in the stream by government officials, and the licenses issued being specific as to the stage at which water can be taken from the stream under such license held by any individual or company.

"In this way we hope to prevent the streams being taxed beyond their capacity to supply the constructed ditches, with the accompanying loss of capital which would result from the construction of systems to take water from a stream which was already taxed to its full capacity to provide for those having prior rights. It will therefore be seen that the holder of a license for water under our Act has a definite title to a certain quantity of water at a certain stage of the river, and that dispute as to this stage

of water is not possible, owing to the fact that the guage rods placed clearly indicate the different heights of the flow of the stream from extreme low water to freshet or flood discharge. And as the Act also provides that the holders of licenses shall have priority as between themselves in the order of the date of their licenses, and that any disputes as to the diversion of water under these licenses shall be settled by the Minister of the Interior after an inspection by the inspector, and that this official is granted authority to close down and lock the headgates of any ditches taking water to which they are not entitled, as instructed by the minister, it will I think be admitted that the title granted by our Act is a good one, and that the holder of a license receives full protection of the law without any cost to himself, in the enjoyment of the rights which he has acquired by compliance with the provisions of the Act. Our law is I think the only one on this continent which provides for such careful first diversion of the water and for such complete subsequent protection to users by permanent government officials who are in no way subject to the influences resulting from an elective tenure of office; and we look to these provisions to prevent to a very great extent the unfortunate, and in many cases ruinous litigation which has resulted elsewhere owing to disputes between users of water as to their title thereto.

"Full provision is made in our law for the cancellation of the rights owned by any license holder owing to the abandonment or neglect to use the water granted, the question of the abandonment and neglect to use the water being dealt with by the Minister of the Interior on the report of the inspector and without reference in any way to the legal courts. This provision will doubtless prevent the tying up of the available water supply in any stream, as existing rights can be cancelled and new licenses issued therefor with little or no delay, if the holders of the original licenses do not make use of the water granted to them, and in this manner it is expected that the greatest benefit from the use of water will accrue to the greatest number.

"The unauthorized diversion or use of water is prevented by a stringent clause in the Act, which provides for a penalty of fine and imprisonment upon a summary conviction, obtained either upon the information laid by the inspector or by any individual aggrieved. As yet, we have not found it necessary to enforce the provisions of this clause, as the users of water have shown every desire to avail themselves of the provisions of the Act and to acquire the permanent title which it is recognized that the licenses issued carry with them.

"Provision is also made in the Act for the adjustment of disputes between any company undertaking to sell water and those using water from the works of such company, by a government official; and also regarding the disposal of any surplus water flowing in the works constructed by any company. By exercise of these provisions it is hoped that disputes under these heads will be kept entirely out of the courts and relegated to the office concerned in the granting of these rights in the first instance.

"Finally, the law makes provision for the passage by the Governor General in Council, from time to time, of such regulations regarding the measurement and use of water, the duty of water, the irrigable season, the fees to be charged by companies for water, and the extent of the diversion of water from rivers, streams, lakes or other sources, and such other features as may arise in the administration of the Act, and for which provision is not made in the Act itself.

"The foregoing brief outline of our irrigation law will serve to illustrate the steps which we have taken in the endeavour to regulate this important work in such a way as to fully protect the interests of the public, and at the same time permit of the available water supply being utilized to the fullest extent in the reclamation of our arid area. Of course it is rather early in the day to speak definitely regarding the success which we may have in the accomplishment of these ends under the law as it stands, but our experience so far certainly justifies the statement that careful administration of the provisions of our Act by competent government officials will, to a very great extent, permit of those desirable ends being realized."

Department of the Interior.

NORTH-WEST IRRIGATION DISTRICTS ORDINANCE.

At the last session of Parliament, the ordinance regarding irrigation districts which was passed by the North-west Legislative Assembly in 1894 was confirmed, and is now part of the law relative to the construction of irrigation systems in the Territories.

The Springbank Irrigation District, which has been created under the provisions of the ordinance, has completed its applications for water rights from the Elbow river and Jumping Pound creek, and intends, I understand, to proceed with the construction of the necessary canals heading in those streams.

The experience of this district in the construction and maintenance of irrigation works as a municipal undertaking will be watched with great interest, for the problem they are attacking is one which has interested the residents of many of the irrigable states and territories to the south of us, and the experience there, with the possible exception of Utah where ditches have been constructed by the Mormons as mutual undertakings, has not been at all satisfactory. There is, I presume, little doubt that the ideal irrigation law is that which would permit of the available water supply being used to its fullest extent through systems owned by the actual users of the water, and which had been constructed on a sound engineering and economical basis by the users themselves through mutual organization and effort. All the laws of this continent, including the ordinance above referred to, fall very short of this ideal basis, for they all contain provisions which permit of municipal jobbery and speculation in bond and debenture issues calculated to bring this class of municipal public works within the same category as those municipal undertakings which have produced such unsatisfactory results in many parts of Canada and the United States. The North-west Irrigation District Ordinance is, it is true, safeguarded by provisions relative to an appeal to the Minister of the Interior, and with reference to the actual acquirement of water rights which are not found in any of theAmerican laws of this character, but the limit of expenditure on both capital and maintenance accounts are, in my opinion, beyond what the earning power of irrigated land in this immediate district will stand.

I have the honour to be, sir,

Your obedient servant,

J. S. DENNIS,

Chief Inspector of Surveys.

PART IV

IMMIGRATION

IMMIGRATION.

PREFATORY REPORT OF THE CLERK OF IMMIGRATION, OTTAWA

DEPARTMENT OF THE INTERIOR,
OTTAWA, 20th December, 1895.

To A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—By way of preface to Part IV. of this year's annual report, I have the honour to submit a very brief synopsis of the work performed in the Immigration branch.

CORRESPONDENCE.

During the first ten months of 1895 we made 6,482 attachments to our files, and as usual took care that all letters of inquiry were promptly and fully replied to.

IMMIGRATION LITERATURE.

The following publications have been brought out under my supervision since the date of my last report, viz. :

	Pages.	Issue.
Official Handbook, new edition.....	88	50,000
"The Canadian North-west.".....	14	10,000

The last mentioned is a small but well written pamplet by Mr. Septimus Field, of Asessippi, Manitoba, who is himself a settler in the country, and a man of long experience in agricultural pursuits on both sides of the Atlantic, whose judgment cannot fail to carry weight with intending emigrants.

Our stock of literature in foreign languages is now somewhat low, but we are replenishing it by bringing out new and carefully revised editions of our standard pamphlets.

We have, as in previous years, purchased and distributed a considerable number of copies of special issues of periodicals containing valuable letterpress and illustrations. One of the best of these was the Manitoba harvest edition of the Toronto *Globe*, of which we circulated 10,000 copies, chiefly in England and the United States.

We have sent out altogether since my last report 95 cases, containing 114,125 pamphlets and other publications, for distribution through our agencies and the agencies of the transportation companies, and some 2,500 small packages, sent by mail to individual addresses.

WORK IN THE UNITED STATES.

We have now at work in the United States, Captain Holmes, who goes where directed, as circumstances arise indicating where work may be done ; Mr. C. O. Swanson, who works chiefly amongst the Scandinavians in the New England States ; Mr. P. F. Daly, who has charge of the temporary inquiry bureau at Chicago ; and 61 local men, who, for a small commission on actual results, are doing a good deal to promote our interests, chiefly by distributing our literature and keeping alive the interest awakened by our salaried agents in previous years.

JUVENILE IMMIGRATION.

The close supervision of juvenile immigration on the part of the departmental officers has been the cause, no doubt, of the further reduction disclosed by the agents' reports in the number of children brought out this year under the auspices of philanthropic societies, and the advantages which have accrued from the weeding out system necessitated by the present regulations, in the selection by these societies of subjects for immigration, is made evident by the reports of our inspectors for this year, which are on the whole very satisfactory. On this point I desire to draw particular attention to the reports of Messrs. McGovern and Herbert.

INFORMATION SENT TO BRITISH CONSULS.

On the 11th of July last a letter of inquiry with regard to this country was addressed by H. M. Consul General at Hamburg to the High Commissioner.

This led to our sending a circular letter and package of publications to each of some 300 British consuls, in countries from which we are likely to draw emigrants, and many of these gentlemen have sent us very kind replies, promising to make use of the information thus placed at their disposal.

VISIT TO FATHER PARADIS' COLONY.

Early in June I paid a visit to the repatriated French Canadians who have formed a colony near Verner, in the Nipissing district of northern Ontario. The colony was then in its early infancy, the first settlers having arrived only seven or eight weeks before the date of my visit, but I found that really remarkable progress had been made, and was most favourably impressed with all I saw. The founder of the colony, Father Paradis, is evidently a man of resource and great energy, and its members struck me as being altogether of the right material.

Father Paradis makes a report, which will be found further on in this section.

GENERAL REMARKS.

We have had, on the whole, a busy year, and I think that few persons who read carefully the contents of Part IV., and your own remarks, and those of the Commissioner of Dominion Lands (in Part I.) on the subject of immigration, will fail to admit that we have made the most of our very limited resources, and have neglected no opportunity of bringing the advantages Canada has to offer to the notice of the emigrating classes in other lands, and that too in a manner calculated to be both forcible and convincing; besides which it will be seen that we have provided proper means for the reception and care of those who are convinced and come forward as immigrants, so that the essential details of our work are as complete as it is at present possible to make them. What we might do if we had more money at our command is, however, another matter.

I have the honour to be, sir,

Your obedient servant,

L. M. FORTIER.

REPORTS OF THE HIGH COMMISSIONER AND EUROPEAN AGENTS.

No. 1.

REPORT OF SIR CHARLES TUPPER, BART., G.C.M.G., C.B., HIGH COMMISSIONER FOR CANADA.

VICTORIA CHAMBERS, 17, VICTORIA STREET,
LONDON, S.W., 7th November, 1895.

The Hon. T. MAYNE DALY, Q.C., M.P.,
Minister of the Interior,
Ottawa, Canada.

SIR,—You have asked me to send you the annual reports on emigration earlier than usual, in view of parliament being called together in January next. There are still nearly two more calendar months of the year to run, but for all practical purposes the emigration season may of course be considered at an end.

AGENTS' REPORTS.

I communicated your wishes to the agents of your department in the United Kingdom and on the continent; and I now inclose the reports of Mr. John Dyke, of Liverpool; Mr. J. W. Down, of Bristol; Mr. E. J. Wood, of Birmingham; Mr. Thomas Grahame, of Glasgow; Mr. Peter Fleming, of Dundee; Mr. W. J. Stuart, of Inverness, and Mr. Bodard, whose office is in Paris. No successor to Mr. Leary having been appointed in Ireland, the emigration work in that part of the United Kingdom has been conducted as much as possible from my own office.

There is little to be said on the subject of emigration beyond what has been stated in my annual reports of recent years, and in the reports of your agents. They are all gentlemen thoroughly conversant with the business, with experience more or less extended, and they are therefore intimately acquainted with the matters upon which they write. Although their activity has been somewhat circumscribed during the past year, owing to the smallness of the funds available for emigration work, I have no hesitation in stating that they have endeavoured to make up for this deficiency by extra exertion and zeal in the work upon which they are engaged. They have been unremitting in their efforts to attract attention to the advantages which Canada offers to settlers, and have done everything that has been possible to stimulate the movement of desirable persons in the direction of the Dominion.

TRADE PROMOTED.

The activity of these gentlemen has not been confined to emigration matters, although that part of their work necessarily occupies the greater part of their time; but they have also, on every possible occasion, endeavoured to stimulate the interchange of trade between Great Britain and Canada, and with considerable success. This remark applies especially to Messrs. Dyke, Grahame and Down, whose offices are established in important distributing centres of the United Kingdom. In fact, I can truly say that the Dominion may be congratulated upon the service that has been done on its behalf during the past year by the gentlemen to whose reports I have been referring.

BRITISH EMIGRATION RETURNS.

The emigration returns for the nine months ending September show an increase over those of last year—most of the additional people being apparently included in the emigration to the United States and to South Africa. You are aware that I do not attach much importance to these statistics, especially so far as they concern emigration to Canada. For instance, the returns include as emigrants all steerage passengers, whether bona fide emigrants or not. In this connection, it will readily be seen by those who are accustomed to ocean travelling, that the reputed emigration to the United States, for instance, must include not only a very large number of residents in that country, who are returning from more or less extended visits to Europe, but also a considerable number of Canadian emigrants, travelling to their destinations by way of American ports. Deducting these two classes from the total, the United States emigration figures would be very much reduced indeed.

EMIGRANTS TO CANADA OF A GOOD CLASS.

So far as Canada is concerned, the emigration from Great Britain was of about the same dimensions as last year, and there is little doubt that the Dominion has had a very fair share of the bona fide emigration that has taken place. All the agents speak of the emigrants to Canada as having been of a superior class, and I am quite sure that you will have received similar representations from your agents in the different parts of the Dominion.

I do not for a moment intend to infer that the emigration is as large as I should like to see it, but I do maintain that an emigration movement cannot properly be forced, although it may be stimulated, and that we have as the result of our exertions had a very fair share of the real emigration that has taken place.

INFLUENCE OF BAD TIMES.

The times have been bad in Great Britain for some time past, although there are symptoms of a revival; but at these periods emigration is never very brisk, especially when, as has been the case for some years back, the countries inviting immigration have not been in an especially flourishing condition themselves. This applies to Canada, and although the effects of the depression have not been so serious there as in many other countries, there is no doubt that the correspondence passing between Canada and Great Britain has not been of so encouraging a nature as we are often accustomed to, a circumstance which tends to explain to a certain extent the falling off in our immigration.

FARMERS UNWILLING TO MOVE UNTIL COMPELLED TO.

It must be remembered also, as I have explained before, that we have to be very careful in emigration work. The only classes which we are able to encourage are farmers, capitalists, farm labourers, and domestic servants. The number of farmers is comparatively small in itself, and but a small proportion of them emigrate while their capital remains intact. They are the most conservative of people, and, even if unsuccessful, will remain on their farms to the very last in the hope of better times occurring. I keep in constant touch with the agricultural community, in order to create a feeling in favour of Canada; and although our success in this direction is not so great as we would like, there is little doubt that Canada as an emigration field does stand well with the agricultural community. If many of the farmers would get out of their holdings before the crash comes, they would be acting wisely on their own behalf, and on that of their families; but there is a tendency to put off the inevitable, either because prices are low and they do not like to realize on their stock, or because of the expectation that something will turn up. After their capital has gone they are often thoroughly discouraged with agriculture, and endeavour to obtain a livelihood in some other way.

ATTITUDE OF OTHER CLASSES.

Capitalists are not a large class, or, as a rule, an emigrating one, but everything that can be done to keep Canada before their notice is being accomplished. Farm labourers do not emigrate in large numbers. Their wages are small, they live from hand to mouth, and rarely have enough money in their possession to pay for the passages of themselves and their families. If possessed of enough money for that purpose they would consider themselves fairly well off and go into allotments. Comparatively few of them look with equanimity on spending a considerable sum of money in travelling, and besides as a rule they are not an enterprising people. Naturally there are exceptions, and we get many desirable emigrants from this class; but here again, if they would go to Canada instead of migrating to the large towns and cities, it would be ever so much better for them and for their families.

DOMESTIC SERVANTS.

As I have pointed out on previous occasions, we are not likely to secure any large number of domestic servants unless something is done to lessen the cost of the passage, to exercise some supervision on the way out, and to make arrangements for their reception by committees in the different parts of Canada, with whom they can communicate and secure situations.

MECHANICS, &C., NOT ENCOURAGED TO EMIGRATE TO CANADA.

We do not encourage the emigration to Canada of mechanics, general labourers and navvies, or persons following the professional and lighter callings, unless they go out on the advice of friends already settled in the country, or possess some special qualification. It is with these classes that the great desire for emigration exists, but to encourage it to any extent might be to create congestion and difficulty in Canada, with the inevitably result of throwing back emigration of the people for whom there is a demand, for mane years. Great care has therefore to be exercised on the part of your agents in discriminating as to the persons who are to be encouraged and discouraged to emigrate, and I think it will be admitted that their efforts in these directions have been very successfu l

STEAMSHIP FARES.

You are aware that for the greater part of the present year the steamship fares to Canada were lower than they have been for many years, both directly to Canada and via the United States. It, however, had little or no effect upon the emigration for the reasons to which I have already alluded. In fact there is always a danger when very low fares are in operation of undesirable emigrants being thereby induced to go out, or of their being assisted out of the country for their country's good; and I naturally directed special efforts to the supervision of emigration in view of these circumstances.

THE APPARENT FALLING OFF OF IMMIGRATION TO CANADA.

I wrote you a despatch a few months ago, giving my ideas as to the falling off that was shown in emigration returns in the spring, and I think I cannot do better than quote it in this report. The falling off that was apparent in the earlier months of the year has not continued, and as I have already stated there is very little difference between the figures of the two years up to the present date so far as Canada is concerned:

"I drew the attention of the agents of your department to the falling off in the emigration to Canada from the United Kingdom, as disclosed in the Board of Trade Returns for the month of April, and I now send you copies of the reports received from those gentlemen on the subject.

"They contain but little that is new, but they serve to explain the reasons for the decrease which appears to have taken place.

"I am of the opinion, however, that the nominal decrease is greater than the actual decrease, from the fact that there is an increasing tendency for persons travelling to Canada—particularly to the Eastern Provinces—to travel by way of the American ports. This, of course, does not apply to emigrants going to Manitoba and the west, because the difference in the ocean rates is more than compensated for by the low prices on the Canadian Pacific Railway to Winnipeg and the West. There is, however, always the attraction of the larger and faster vessels of the American lines."

"I must point out, however, that the United States figures altogether exaggerate the movement that takes place to that country. A very large number of persons, owing to bad times, left the United States at the commencement of last winter for their friends in the United Kingdom and on the Continent. Many of these are in the course of returning to the United States and are not, therefore, really emigrants, although they are classed as such. In fact, as you are aware, the Board of Trade returns make no distinction between ordinary steerage passengers and emigrants, and all passengers travelling by way of United States ports are classed as emigrants to that country, although they may be booked to places in Canada.

"You are aware also that, owing to the necessity of economy, we have not been able to advertise at all during the last winter, and the effect has been seen in our correspondence, which has been nothing like as large as it has been in former years. Of course, we have not been idle, and have adopted every possible means to attract publicity to Canada by methods which have not involved any expenditure to speak of. I refer to general contributions to the press, to the publication of letters from settlers when they were suitable, to the circulation of the Canadian *Gazette*, to the distribution of Mr. Parkin's work, and to the large number of lectures that have been delivered, illustrated by slides which we have, and to the display of our posters in the post offices. In addition, the steamship companies and their agents have naturally done their best to secure passengers, as their well-being depends upon it; but I always look upon our annual advertisements as an invaluable means of keeping our country before the public.

"As you will have gathered from my annual reports, our efforts are somewhat restricted in so far that we are only able to encourage the emigration of farmers or those wishing to engage in agriculture, farm labourers and domestic servants—comparatively few of which classes emigrate, although we lose no opportunity of keeping the advantages Canada offers to them well to the front—and, of course, we cannot afford to relax our efforts in that direction, in view of what is being done by other colonies and countries. We are not able, however, to offer many inducements, especially at the present time, to mechanics and unskilled labourers, unless they are proceeding to join friends already settled in the country; and it is these classes and those who have no means, who make up the bulk of the people who are talking of emigration.

"It is of no use disguising the fact also, that the depression which has existed in Canada—even though it has been less widespread than in other countries—has had an effect upon the emigration movement so far as we are concerned; and the number of unsatisfactory letters which have been coming to my notice, both in the press and in other ways, cannot fail to produce a feeling in prejudice of Canada in the districts in which they are received. However, all these difficulties in our way will right themselves in time, and we must keep pegging away in order to take advantage of an increased emigration to Canada immediately the time is ripe for it.

"I have tried to show that the emigration movement, as disclosed in the Board of Trade returns, especially to the United States, is not so large as the statistics indicate, and I may add that, although the numbers going to Canada are not so large as we should like them to be, there is no doubt that the cream of the emigration, such as it is, is making its way to Canada.

"You may depend upon my doing all that is possible to attract attention to Canada and to increase our immigration, but you must bear in mind that emigration is in the nature of any other commercial business, that money must be spent in order to bring it about, and that the more we advertise ourselves the greater will be our correspondence, and the greater will be our immigration."

INSUFFICIENT FUNDS.

Our activity during the last year, as already mentioned, has been somewhat curtailed by the smallness of the funds voted for immigration purposes. Consequently there was no advertising done, and little or no printing, and we were unable to have exhibits of produce displayed at the agricultural shows, as in previous years. I arranged, however, both for our own agents and the steamship companies to display extra personal activity on these occasions, in order to get into communication with the farmers, and to distribute as much information as possible, and the matter is referred to in their reports.

ADVERTISING THE COUNTRY.

Fortunately, the edition of the Tenant Farmers' Delegates' Reports prepared in 1893-94 was sufficient to carry us through the winter and spring of 1894-95. Considerable publicity was obtained for Canada, not only by the bills circulated in all the post offices in the United Kingdom, and by the increased attention which is given in the press to Canadian affairs, but by the activity displayed by the steamship companies' agents, by the great railway companies, by the philanthropic societies which concern themselves with the promotion of desirable emigration, and by the Emigration Committee of the Society for promoting Christian Knowledge, of which His Grace the Archbishop of Canterbury is the president, and the Rev. Mr. Bridger the organizing secretary.

LECTURES AND LANTERN SLIDES.

Canada also attracted a good deal of attention during the year, as the consequence of the hundreds of lectures that were delivered on Canada in different parts of the country, illustrated by the lantern slides which we loan for that purpose. A year or two ago we only had two or three sets of slides, but now there are nearly 30, and during the autumn and winter and spring months every one of them is in continual use; indeed, they have to be sent from one place to another direct, instead of being returned to this office after each lecture, in order that all the requests for the loan of them may be entertained. These lectures are delivered by persons who have visited Canada, by clergymen, schoolmasters and others, as well as by our own agents, and the agents of the steamship and railway companies. Naturally the opportunity is taken of distributing pamphlets on all these occasions.

CANADA IN THE SCHOOLS.

I must pay an especial tribute to the great and widespread interest which the schoolmasters are taking in making their pupils better acquainted with the geography and resources of Canada. I am in constant communication with thousands of schoolmasters in different parts of the country. They are not only supplied with maps of Canada for display on the school walls, but with pamphlets which are used as readers, and in connection with the study of the history and geography of the empire. As the books are often taken home in connection with the preparation of lessons, Canada is introduced into many thousands of houses every year in which the subject might not otherwise come up for discussion.

THE FUTURE OUTLOOK.

With regard to the future there is every reason to believe that our prospects are very hopeful. Trade is reviving in this country, which is always in favour of increased emigration, and the wonderful harvest that has been gathered in Manitoba and the

North-west Territories, as well as in the other parts of Canada, should have an effect also in stimulating an emigration movement—especially in the many cases that come under my notice where people have been postponing their movement until the approach of better times.

PLANS FOR THE WINTER.

Then again, we are arranging to advertise this winter again as extensively as the funds you have placed at my disposal will permit, and we shall also have new pamphlets for distribution, which are sure to be widely noticed in the columns of the press. Arrangements are already being made for a larger number of lectures on Canada than have been delivered in any previous year, and the letters which I am quoting, in a supplementary report, from the steamship and railway companies concerned in emigration, bear out the hopeful view that I have formed.

HOW SETTLERS IN CANADA CAN HELP.

We should like to have more co-operation and support than we receive from farmers in different parts of Canada. If they would only communicate more regularly than they do with their friends, send over newspapers containing evidences of Canadian prosperity, and also write to the old country newspapers recounting their experiences, there is no doubt it would prove a most valuable aid to us in our work. I should also be able to make excellent use of any such letters if sent to me direct.

PAUCITY OF "PREPAIDS."

We are hampered also in our emigration work by the fact that the proportion of emigrants to Canada whose passages are paid by their friends there is infinitesimal as compared with the number of similar emigrants to the United States. It has been said that of the actual emigrants to the United States from 60 to 70 per cent are what are known as prepaid, while in the case of Canada it is doubtful if the proportion is more than five per cent.

IMPERIAL INSTITUTE.

The Imperial Institute, with its collection of Canadian produce, is a useful aid to our work in connection with emigration. It is visited by a large number of people in the course of the year, and they not only obtain practical information from the curator and assistant curator, both of whom are Canadians, but a considerable quantity of pamphlets are circulated in that way.

PROVINCIAL AGENTS GENERAL.

As you are aware, several of the provinces have now agents general in this country, notably Nova Scotia, New Brunswick, Ontario and British Columbia. I am glad to see also that a local representative is coming over from Manitoba. These gentlemen, with whom I work in the most cordial co-operation, do a great deal to attract attention to their particular provinces, and no doubt the most useful results will be forthcoming.

EMIGRATION OF CHILDREN.

The emigration of children has taken place very much on the same scale as last year. It is now better regulated than it was formerly, measures being taken to ensure that none but healthy children are sent out, and that the arrangements for their supervision, both on the way out and in Canada, are properly organized.

AN IMPERIAL STATE-PAPER ON THE ADVANTAGES OF CANADA.

I must take the opportunity in this communication of calling attention to the valuable report which you prepared on the advantages the different provinces of Canada offer to intending emigrants. In the form of an Order in Council, this paper was transmitted to the Colonial Office, and subsequently presented to Parliament by order of Her Majesty. In that way it secured considerable prominence, not only among members of Parliament, but in the press; and a special issue which was printed off for widespread circulation naturally attracted a good deal of attention.

FARM PUPIL FRAUDS.

The farm pupil business still continues to flourish, I am sorry to say, notwithstanding all our efforts to put a stop to it. Within the last year one or two associations have been particularly active, but several cases have come under my notice in which difficulties have occurred owing to the promises made to the young men not having been carried out. Innumerable warnings have been issued in the press, and that, of course, is the only means by which the matter can be kept before the public. I am now arranging to again call attention to the matter.

CONTINENTAL EMIGRATION.

With regard to continental emigration we have been continuing our work there in an effective but unobtrusive way. There is no doubt that the Dominion is becoming better known on the continent every year. This is evinced not only by the more frequent reference to Canada in the continental press, but by the number of people who are proceeding annually to the Dominion. The field, however, is such a large one that it will take many years and large expenditure of money before any appreciable results can be obtained, especially in view of the fact that most of the countries on the continent use every effort that is possible to discourage the emigration of their people.

CONCLUSION.

I have only to assure you in conclusion that I take the keenest possible interest in the promotion of emigration to Canada, and that I shall continue to do all that I can in that direction. I have no hesitation in saying that I regard the filling up of the vacant lands in Manitoba and the North-west Territories, as well as in the other provinces of Canada, as one of the most important matters—if not the most important—that can engage the attention of the Government of which you are a member. You know we have been handicapped considerably for some time past in regard to the smallness of the funds that are available for emigration purposes. I do hope the Government will be able to induce Parliament to put aside annually a much larger sum for immigration work, and that an even larger proportion of it than usual may be placed at my disposal, for it is in this country and on the continent that expenditure is needed. If we ever expect to get a large emigration we must keep Canada continually before the world, and especially before those sections of the population which we desire to reach.

I have the honour to be, sir,
Your obedient servant,

CHARLES TUPPER,
High Commissioner.

SUPPLEMENTARY REPORT OF THE HIGH COMMISSIONER.

VICTORIA CHAMBERS, 17, VICTORIA STREET,
LONDON, S.W., 11th November, 1895.

To the HON. T. MAYNE DALY,
Minister of the Interior.

SIR,—In my annual report on emigration matters I made reference to some communications from the steamship companies and from the tenant farmer delegates in regard to emigration.

I now beg to quote extracts from the letters from the steamship and railway companies :—

Messrs. Allan Brothers & Co., Liverpool, write as follows :—

"We are favoured with Mr. Colmer's letter of the 25th inst., requesting us to give you any observations we may have to make upon the emigration which has taken place to Canada this year.

"The report we made to you on the 14th January of this year practically represents the situation at present. We have throughout the whole of the year never ceased to distribute printed matter freely to all our agents in the United Kingdom. Government books we could not distribute to any great extent, as our stock was very low, the only books on hand being the Delegates' Reports, and of these we have now only a few hundreds in our possession. Of our own handbook giving information on Canada in a condensed form we have distributed many thousands. We make it a point to send special supplies of printed matter to the agents who reside in towns where markets, hiring fairs and agricultural shows are held.

"We have continued our advertisements in the public press without intermission, and in addition to our ordinary form giving the sailings of our steamers, we inserted early in the year, and have still running, a special advertisement as follows :—

EMIGRATION.

All who desire information about Canada, the North-west Territories, and British Columbia, should write to

ALLAN BROTHERS & Co.,
19, James Street, Liverpool,
for their Handbook of Information, which is sent free.

"This advertisement has brought us many thousands of letters, and in addition to sending a handbook we take the opportunity of inclosing reprints of letters from settlers speaking highly of Canada ; we attach samples of the letters so that you may judge for yourself.

"Our traveller is continually moving round the country amongst the agents replacing those who have become inactive, and reporting to us daily the requirements of each agent whom he visits. We are of course in constant communication with them ourselves and keep them posted on all matters concerning emigration.

"The large harvest which has been gathered in the North-west will no doubt help to stimulate those already settled, and they in turn by sending home good accounts will induce their friends to sell up and go out to them."

The Beaver Line write as follows :—

"So far as this line is concerned the emigration to Canada has not been very encouraging, but we believe the prospects for the coming spring are much better. All that we can do to stimulate the emigration to Canada will be done, but we are unable to make any suggestion to you in this direction."

The Dominion Line write as follows :—

"Referring to your favour of the 25th ult., we regret to say that emigration to Canada by Canadian lines during the past year has been very limited. As you are aware, extremely low fares were in operation for some considerable time, and one or two of the States lines were offering very large commissions to agents with a view to securing the bulk of the steerage traffic. It is unnecessary for us to say that the agents, who are always alive to their own interests, took advantage of these high commissions and induced as many passengers as possible to travel by the lines in question, consequently a large number of emigrants destined for Canadian points were sent via Philadelphia or New York, and it is impossible for us to base our calculations or express any opinion on the past year's Canadian emigration, seeing that we cannot obtain any figures that would show the number of such emigrants who sailed hence by New York or Philadelphia lines. However, the emigration business has been placed on a better basis and the Canadian lines will undoubtedly secure a larger proportion of the traffic to which they are entitled.

"With regard to the prospects for next year's business, we have every reason to believe that there will be a large increase in emigration. The exceptionally large crops which have been realized in Manitoba and the North-west will undoubtedly attract the attention of many intending settlers, and be the means of drawing them out. We understand that British Columbia is attracting the attention of English investors, and we have reason to believe that ere long that part of the country will be boomed, and will naturally attract a large number of miners and others from this country, in addition to those who will emigrate from the United States."

Messrs. J. & A. Allan, Glasgow, write :—

"We have been asked by Mr. Colmer to send you a report on the past season's Canadian passenger business, so far as it applies to our steamers sailing from Glasgow, and to make any suggestion that in our opinion would tend to increase emigration to Canada next year. Since the receipt of Mr. Colmer's letter we have had a copy of the report which our Liverpool friends have sent you, and we have but little to add to what is contained therein. In our last report to you we expressed the hope that this year's Canadian traffic would be greater than it was in the previous year, and this, in a measure, has been realized, although to a small extent. We have had the same number of passenger boats this year to Quebec and Montreal as we had last year—namely, 8, and the passengers carried in them, when compared with the previous year, show an increase of 60 souls. While this is gratifying, it cannot be regarded as other than a very poor season's work. We have in no way relaxed our efforts to secure passengers for Canada. We have distributed large quantities of printed matter all over the country, and have advertised extensively in the principal newspapers throughout Scotland. Greater inducements, however, than at present offered, will, in my opinion, have to be held out to the farming classes if emigration to Canada is to be increased next year. What form these should take is for the Canadian government to determine.

"Perhaps the reports which have reached this country of this season's splendid harvest in Canada and the North-west will be the means of inducing may to immigrate thither next year. Let us hope so."

I have received letters from the European representatives of the Canadian Pacific and Grand Trunk Railway Companies. The former writes:

"Replying to your letter of the 25th October, in connection with immigration, in which you ask me to give you my views on that question. There have been various causes at work during the past year against successful immigration to Canada, amongst others the unfavourable reports received by people in Great Britain and Europe from friends who had emigrated to Canada; this, together with the unsatisfactory condition of business, both at home and abroad, has resulted in a serious, although I believe only temporary depression in emigration.

"As to the future, I think that in view of the magnificent harvest with which our country has been favoured, no effort should be spared to put this prominently before that portion of the community from which we hope to draw a satisfactory proportion of emigration, and we are making this winter a very large and extended distribution of

the various reports in connection with the harvest, which cannot but tend to have good effect on emigration for the coming season.

"Our experience has always been that the emigration movement ebbs and flows without any apparent reason, and the indications now all point to the fact that the lowest mark has been reached, and that in the coming spring we may hope to see very much better results than have been achieved since 1893."

The latter writes :—

"I am of the opinion that the cause of the decline in emigration during the past year was owing to the universal depression in all lines of trade. Although such was not felt so keenly in Canada as the United States, still it influenced general business to such an extent as to create rumours sufficient to check the flow of emigration to the Dominion. The scarcity of English emigrants is, I think, owing to the tendency of labourers to migrate to the towns, seeking employment of any kind in preference to that of agriculture. However, we look forward to a more active emigration in the spring of 1896. While our general trade does not show so pronounced an improvement as the United States, still there are indications of a steady revival of trade and commerce, and we are preparing special printed matter for Great Britain and the Continent, to bring out more clearly and concisely the advantages Canada offers as a field for emigration. The excellent harvest this year should prove a strong factor in turning the minds of intending emigrants to our shores; and if a short report in pamphlet form giving particulars of this were sent over here, it could be judiciously distributed amongst farmers and others, and would no doubt produce good results."

I took the opportunity of communicating with the delegates who were out in 1893, asking them for their observations on emigration matters, based upon the correspondence they have received as to the consequences of the circulation of their reports. I beg to quote the replies that have come to hand from the gentlemen in question.

Mr. Arthur J. Davis, of Upper Hollings, Pensax, Worcester, writes:—

"During the past year I have received a considerable number of communications asking for advice and information from persons either about to emigrate to Canada or elsewhere. These I have made a point of answering to the best of my ability. I regret to say that several young men from Kidderminster and district have returned from Canada since I last wrote you on this subject. These young men were either clerks or operatives, in my opinion, the least desirable of emigrants to an agricultural country. I would again beg to point out the great field there exists in this country for obtaining the best class of settlers from among the agricultural population, more especially from amongst farmer's sons and daughters. The great depression existing in agriculture here causes this class to be educated chiefly in our board and voluntary schools, instead of, as formerly, in private ones, and as they get strong and old enough are required to assist in the work of the farm. Unfitted to compete against their more highly educated town cousins, used to country life, they form the class from which should be drawn, if possible, emigrants for our colonies. I believe a great impetus would be given to female emigration to Canada if situations could be procured for them before leaving this country. Fathers and mothers naturally object for their daughters to land on a foreign shore with no knowledge as to where they can find a home. I believe that the services of delegates should be more utilized in giving lectures in those counties which they represent, believing, as I do, that it has far more weight with the majority of people to hear the opinions of persons disinterested in the matter than those who are so, such as agents. My own time is pretty fully occupied, but if out-of-pocket expenses were paid I should be pleased to give a series of lectures to advance the cause of emigration to Canada. I shall be most pleased to give any other information I can."

Mr. E. H. Dempster, of Corner Wiston, Hareford west, writes :—

"I am in receipt of a letter from Mr. Colmer, dated 25th ult., in which he desires me to write you my opinion on emigration to the Dominion. I beg to say that from the correspondence which I have had from settlers and others in Canada to the effect that stock came in from ranches, &c., in such good condition last spring, I think a delegation to visit the country at that time of the year is most essential, more so because some unsuccessful people say that the country is only reported upon where the brightest pictures may be drawn.

"I have had correspondence from people whom we visited in September, 1893, which is most encouraging. I would suggest that the same delegation (or part of them) should visit the Dominion in spring, and compare the present position of farmers to that when they were visited in 1893, and also to report upon the general condition of the country after winter is over."

Mr. R. H. Faulks, of Langham, Oakham, writes :—

"In answer to inquiries regarding my views on emigration to Canada, &c., I may state that the number of letters received by me are not so numerous as last year. Not that I think the interest of the people has grown cold in the matter. The reports of the delegates have been read with much interest by all classes, and the agricultural value of Canada has thus been placed before the English people more prominently.

"I believe many hesitate to emigrate being fearful of the winter climate. My commission to Canada ending before winter began, does not allow me to give a personal opinion of it, which I should only have been too happy to have done could I have stayed. My friends in Canada, however, appear to bear and like it well.

"I learn from my correspondence that one of the mistakes many settlers make is starting short of capital, and so have to buy on credit; borrow money from loan companies paying thereon a high rate of interest. These things might answer well in the palmy days of wheat growing, but should be carefully avoided now.

"Mixed farming should certainly be advocated, and the knowledge and management of horses, cattle, sheep, pigs, and poultry made generally known. Sheep of the short wool class are best suited for districts where there is not much natural shelter. I feel convinced that the prairie is well suited to sheep, and that they will ever be a source of profit to the farmer when their management is understood.

"At present I would not advise a large emigration of the labouring class, for, from letters received by me, I learn that there has been a large influx of that element.

"For my part I view with confidence the future of Canada, and hope to see her fertile lands peopled by the descendants of Britain; for a country of such magnificent resources must ever command their attention and draw to her shores a good share of our surplus population. If my home ties could be broken at the present time, I should not hesitate about making Canada my future home."

Mr. J. Guiry, of Peppardstown, Fethard, Tip., writes :—

"As it may interest you to know how the emigration from Ireland to Canada has progressed for the past year, I beg to let you know that during that time I have been constantly receiving letters requesting my advice as to the desirability of settling in the Dominion. I find that during the 12 months past I have received over 120 inquiries. The inquiries come mostly from heads of families, and very singular to say many of them are from persons resident in England. I would wish to state that I have been the means of sending some steady young men with money to Alberta, and as you are probably aware there is now a fine thriving settlement around Calgary composed of respectable families. I have also induced many to settle in the Edmonton district. As you are aware I have been in communication with parties who may be able to place before a number of Cork tenantry who have voluntarily sold their holdings to the War Office for the purposes of a rifle range in the Kelworth district, the advantages of settling in Canada, and if they can be induced to see the advantages of settling down in Alberta they will be an acquisition to the country as they are a most hardy, thrifty, well conducted, sober people. In the meantime I will not lose sight of the matter."

Mr. Tom Pitt, of Oburnford, Cullompton, writes :—

"I am rather anxious to know (if you can possibly give me the information) what number of emigrants have gone to Canada this year through the instrumentality of the Delegates' Reports, of whom I have the honour to be one, who went to the Dominion in 1893.

"I have had a good many applicants for information on this subject, and I think, several have acted on my advice, and have either gone over, or are intending to do so next spring.

"These were chiefly from young men who were not born farmers, but who, from various causes, have been unable to succeed at home.

"It appears to me that neither small farmers nor their sons care to leave the country; I have, however, endeavoured to impress on all who have applied to me, and others who have not, the great natural resources of the Dominion and the immense assistance rendered by the Dominion Government in various ways to new settlers.

"With the fierce competition with which old country farmers are now struggling, and which is sure, *very sure*, to be in the near future, largely increased, notably from Argentine, I cannot imagine why those with small capital, whose name is legion, do not avail themselves of the grand opportunities which the Dominion (especially in my opinion the North-west) offers. It is a severe struggle just now, even with the strongest of us, and I can see no silver lining to the cloud, even though our present government will do their utmost to afford us some relief, which can only be slight compared with our present distress.

"If you can give me any ideas to assist in removing the prejudice which prevails, I shall only be too pleased to use them with any future applicants."

Mr. John Roberts, of Plas Heaton Farm, Trefnant, Wales, writes:—

"I have received a greater number of letters (chiefly Welsh) from intending emigrants inquiring as to Canada as a suitable country to emigrate to, this year than last.

"I believe the marked improvement in the dairy product of the Dominion (which we farmers feel to our loss) has brought it more into notice of those in search of a new home—it is the products of a country that are its best recommendation."

Mr. Reuben Shelton, of Grange Farm, Ruddington, writes:—

"I am afraid I can add but little to what I stated to you when writing some twelve months ago as to the prospects of emigration to the Dominion. I have since then received several more applications for information and advice from persons contemplating emigration, to all of whom I have endeavoured to point out the advantages Canada has to offer to them; but I am of opinion that Canadian agriculture is just now labouring under the cloud of general depression which prevails to a greater or less extent all the world over, owing to the extremely low prices realized for almost all kinds of farm produce. But be this as it may, it is to my mind, in view of the ever increasing population of the world, inconceivable to believe that the millions of acres of fine agricultural land awaiting settlement in the great North-west Territories can long remain in a prairie condition. It must be almost a moral certainty that the provisional districts of Assiniboia, Saskatchewan and Alberta must, ere very many years have elapsed, become like Manitoba, immense food-producing provinces."

Mr. John Steven, of Purroch Farm, writes:—

"I have much pleasure at the request of your secretary, Mr. Colmer, in writing a similar letter to the one I wrote last year dealing with emigration matters. Judging from the low prices for agricultural produce in Canada and the high wages ruling for agricultural labour in Scotland, there are less inducements for the ordinary emigrant to leave his native land than formerly. When the delegation visited Canada in 1893 wheat was selling at 50 cents per bushel; now it is considerably less, and the same thing might be said to be the case in every item of production. Consequently owing to the uncertainties connected with emigration great caution is exercised in these times of low prices. On the other hand farming in South Scotland never was so depressed and cost of labour never so high. Farming, consequently, is in a very bad state. Landlords, as a rule, are doing little to help the farmer in the matter of reducing rents, and though farmers are trying to tide themselves over the bad times by getting their families to work and thereby reducing the high labour bills, the time must come sooner or later when extended emigration must be the prospective cure.

"When will it come is the question. Low prices in Canada as well as here is one preventive at present. The longer emigration is delayed the greater it will be when it does come. There is little doubt on that point. When once it is impressed on the mind of the Scottish farmer that the advantages are in his favour in going to Canada to farm, he will have little scruple in breaking up old ties and associations to gain these advantages. Though our landlords gave the land for nothing farmers would not be so well off now as fifteen years ago. This state of matters cannot fail sooner or later to have only one outcome, and that must be in the way I have indicated.

"Regarding letters I have received from correspondents during last year these were not so numerous as the year previous, but the inquiries were of the same nature. Most of the correspondents were of the educated classes belonging to large towns; few of them were of the sort suited to pioneer life, and I found it impossible to hold out any prospects of success for them. The kind of settlers who generally succeed are the young country servants and sons of farmers. A great many farmers themselves are too old to emigrate unless for the sake of their families.

"Several of the objections urged against Canada are old stock objections. Extremes of climate, low prices, land held by speculators near towns causing the settler to go far back from railways and markets. I find that a great majority of intending emigrants for Canada besides reading reports and asking the opinion of the delegates, want to know something about their prospects of success from people who have lived there. If these individuals themselves have done fairly well they, as a rule, speak hopefully of the country; if, on the contrary, they have not succeeded, they speak ill of it, and these stock objections I have mentioned are the ones commonly urged. The man of education who is too lazy to work will not succeed in any new country.

"The glowing returns in connection with wheat production, the further development of the country by railways and canals, ought to have a good effect very soon. Emigration, however, is a thing not very easily enforced; it generally moves by fits and starts.

"If Canada builds up slowly but solidly with a good hardy and industrious population it is my belief that this state of matters is a thousand times preferable to the emigration policy of the United States which is the "dumping ground" for all the rubbish surplus population of the whole world. It is also my belief further that land in the States is being cropped barren by continuous wheat growing, that the time will come when Canada will have a much larger flow of population from that quarter. It must be a long time, however, before such a large extent as the North-west embraces can be taken up by the pioneer settler."

Mr. William Weeks, of Cleverton, Chippenham, writes:—

"I think it will interest you to know I have placed over 50 young men this summer on farms west of Winnipeg. I have corresponded with several and have seen letters that others have written home to their friends; they nearly all say they have to work hard, but most of them had to do that at home, and as they enjoy excellent health they don't mind the work. It is very gratifying to me that (with the exception of one boy who did not go to his situation) no word of complaint has reached me either from the boys or their employers. All the boys like the country and say they receive kind treatment. Will you kindly have a notice sent to the press of Manitoba and the North-west that I want good homes for 50 young men next spring. A few have had no farm experience and are willing to work the first year for their board, but the majority of them are farmers' sons, who can milk, plough and do any kind of farm work, and I would like the Canadian farmers who want experienced hands to say what wages they will pay.

"The sooner farmers apply the better, so that there will be ample time for correspondence, and it would be a great help to me if they would tell me the size of their farms, if grain growing, ranching or mixed farming, and would explain just what kind of a boy or man they want. I am convinced that if the right sort of boys are selected and they are properly placed it will be good for the boys and good for the Dominion."

I think you will also be interested in a letter from a leading steamship agent at Birmingham who visited Canada in 1894 in order to enable him to speak personally about Canada to the large number of persons who apply to him for information on the subject:—

"Now that the passenger traffic for the present season is virtually over, so far as Canada is concerned, you may perhaps be somewhat interested in learning something of the results of my efforts with special regard to Canada. I may here observe that since my visit to that country last year, gaining, as I did, more real practical experience by personal observation than upwards of thirty years spent in business at home had afforded me, and seeing the enormous advantages and opportunities which Canada has

at her disposal for those who go out there prepared to labour and to apply their strength and intelligence to an equal degree that they would do in the old country at home, I have felt a much greater interest in my work in that direction, and I may say my efforts have to a large extent been centralized in the Canadian North-west, and the further district of British Columbia. I am proud to think my labours for this year at any rate will not be fruitless, and if I were to omit at this juncture to mention the name of Mr. Ernest J. Wood, who has ever shown me the greatest readiness to assist and co-operate with me, from whom indeed I have received very valuable assistance, I should be both unjust and ungrateful. Comparing the returns of this year, not ten months of which have yet expired, with the total returns of the year 1894, I find an increase of 25 per cent in the numbers of passengers booked, which is satisfactory in view of the general returns published and of the recognized condition of Canadian agriculture and commerce, both of which have been, until quite recently, under the shadow of their own domestic depression, as well as that reflected from the neighbouring United States. But a more significant reason for congratulation lies in the fact that not one single report of complaint has reached me from those sent out during the present season. This is unusual and most satisfactory, especially when considered in relation to the varied and unknown characters we seek to deal with. And here I would like to add that very much of this success arises from the assistance freely and generously given by unofficial settlers in various parts of the country, to whom we have given letters of introduction, and who have interested themselves in procuring situations for those sent out with such introductions. During my progress through Canada, I could not fail to observe the excellent administrative organization as regards the appointment of agents in the principal cities and townships, and I feel assured nothing is more urgently needed to further the efforts being made on this side than the continuance of a vigilant interest on the part of the government agents throughout the colony. If a discriminate selection of emigrants is made here, and a hearty reception, with a readiness to advise and direct is afforded by the government agents in the colony, our united efforts can hardly fail, and both the emigrants and the colony must be benefited thereby. But if no adverse reports have reached me during the present year, many satisfactory results have been heard of from different directions, including Manitou, Edmonton, Prince Albert, British Columbia, and other places, and no better proof could be cited than that of relatives or friends following those who went before, and whose letters have been pressing in their invitation to 'come over and join us.' The character and standing of the passengers for this season are far above the average, and in some instances are exceptional, both as regards education and social position, and also, as to what is perhaps of first importance, financial means. One family, the father a country professional gentleman, having grown up sons and daughters, all highly cultured, took out £5,000, and had an annual income of £1,500. Another family, consisting of a farmer, his wife and six children, possessed of practical experience of many years' standing, took out with him the means of beginning mixed farming just as soon as he got settled and his knowledge of his new surroundings justified him in making a start. One gentleman who made a special study for three years of high class farming, went out to British Columbia, and if he found all things satisfactory is prepared to apply £50,000 in farming in that district. These are a few of the leading instances of those who have gone out through my agency during the present season, and apart from many others of less means, but still sufficiently provided for to ensure a safe footing either in the different parts of Ontario, or in the most distant parts I have referred to in the North-west. A number have also settled comfortably in Montreal, Toronto and other cities, the last two passengers who sailed having decided to go out as the result of the favourable reports from other members of the family who have preceded them during the past eighteen months. It will thus be seen that there is every reason for satisfaction in reviewing the work of the season just closed, for after all, apart from any patriotic or other high motives, it would be extremely impolitic to sacrifice the first principle of securing the success of the settler where possible for the mere mercenary desire of accumulating business for the sake of commission only. I am more sanguine than I have been for a long time past as to the prospects for the coming season of

1896. The English mind is not rapid in its receptiveness, but it is capable of deep and lasting impressions, and the system of enlightening the public by means of such lectures as those given by Mr. Ernest Wood, accompanied by a generous distribution of literature on Canada, among those attending the lectures, has borne most apparent good results, but the full fruits have yet to be gathered, the universal depression which has prevailed having retarded to a great extent the best efforts which have been put forth in the interests of Canada. I need hardly add that the recollection of all the kindness I received from government and people alike on the occasion of my visit to Canada, will stimulate me to use every endeavour, while promoting my own business, to add to the comfort and welfare of those who entrust their business to my care, and thus to take a modest share in the great and meritorious work of colonial development which is being carried on at this time."

I think you will agree with me that the communications I am quoting to you justify the hopeful view I take as to the probability of the emigration to Canada increasing in the near future.

I have the honour to be, sir,

Your obedient servant,

CHARLES TUPPER.

No. 3.

REPORT OF LIVERPOOL AGENT, MR. JOHN DYKE.

15, WATER STREET, LIVERPOOL, October, 1895.

The Honourable T. MAYNE DALY,
Minister of the Interior,
Ottawa.

SIR,—In submitting this my twentieth annual report from the Liverpool agency on emigration matters, I have the honour to inform you that a decided revival has taken place in the outward passenger business during the past season. Though the greater part of the increase is credited to the United States it is not owing to a larger emigration properly so-called, but to the return of many of those who came back to Europe during the financial and industrial crisis of 1894. Writing at this comparatively early period of the year I am not in a position to give statistics, but the figures when published will show a relatively larger increase to the United States than to the Dominion. This is almost entirely owing to the return movement of which I have spoken, helped by the increasing number of people travelling to Canada via United States ports. Of real emigrants Canada has been receiving during the year a larger proportion as compared with the United States than the figures would lead one to suppose, but the extraordinary development of South Africa has drawn greatly increased numbers to that country. There is no doubt that to many people of a good class its attractions are very considerable, and it behooves those working on behalf of the Dominion to keep the advantages of Canada as a field for emigration and the investment of capital continually before the public. The revival in trade which has now commenced will be followed sooner or later by an increased emigration, and the advent of better times in Canada, if combined with a liberal emigration policy, should ensure the direction of a fair proportion of the people to the Dominion.

Those who have gone out during the past season have been of a very good class, and my observations made when visiting outward bound steamers enable me to say emphatically that no finer emigrants than those to Canada leave the port of Liverpool. I have continued to discriminate among inquirers, and have not hesitated to discourage the emigration of those who in my opinion were not fitted for colonial life. The low rates of passage money which have ruled during the year have caused many unsuitable persons to make inquiry as to their prospects on the other side of the Atlantic, and any encouragement, or indeed an absence of discouragement, would have led to an increase in the numbers of unemployed in the Dominion. There has recently been an arrangement made between the steamship companies on this question of rates, but the increased cost of passage will have little effect on the class of emigration which it is our endeavour to promote, with the exception perhaps of that of domestic servants.

The emigration of children has continued under the regulations made by your department, and I have inspected during the year 50 parties, comprising 1,682 children. There is no doubt that the present system has checked the exploitation of children by irresponsible parties, and has secured the exercise of greater care by others working in a legitimate way.

The revival of trade is not being accompanied by a renewal of agricultural prosperity, and the deplorable position of farmers and land-owners is now occupying the earnest consideration of the government.

In my last report I gave some tables showing the acreage under various crops, and the numbers of the live stock on the land, and it will no doubt be of interest if I again set them out and give the particulars for 1895 so that the changes may be noted.

Department of the Interior.

Acreage of Land in Great Britain under Wheat, Barley, &c.

Year.	Wheat.	Barley.	Oats.	Potatoes.	Hops.
	Acres.	Acres.	Acres.	Acres.	Acres.
1890	2,386,336	2,111,178	2,902,998	529,661	53,961
1891	2,307,277	2,112,798	2,899,129	532,794	56,142
1892	2,219,839	2,036,810	2,997,545	525,361	56,263
1893	1,897,524	2,075,097	3,171,756	527,821	57,564
1894	1,927,962	2,095,771	3,253,401	504,454	59,535
1895	1,417,641	2,166,279	3,295,905	541,217	58,940
1895 compared with 1894.					
Increase		70,508 or 3·4 p.c.	42,504 or 1·3 p.c.	36,763 or 7·3 p.c.	
Decrease	510,321 or 26·5 p.c.				595 or 1·0 p.c.
1895 compared with 1890.					
Increase		55,101 or 2·6 p.c.	392,907 or 13·5 p.c.	11,556 or 2·2 p.c.	4,979 or 9·2 p.c.
Decrease	968,695 or 40·6 p.c.				

Number of Cattle, Sheep and Pigs in Great Britain.

Year.	Cattle.				Sheep and Lambs.			Pigs.
	Cows and Heifers in Milk or in Calf.	2 Years Old and above.	Under 2 Years Old.	Total.	Sheep.	Lambs.	Total.	
	No.	No.	No.	No.	No.	No.	No.	No.
1890	2,537,990	1,439,119	2,531,523	6,508,632	16,756,568	10,515,891	27,272,459	2,773,609
1891	2,657,054	1,504,649	2,691,118	6,852,821	17,786,941	10,945,617	28,732,558	2,888,773
1892	2,650,891	1,666,706	2,627,186	6,944,783	17,957,049	10,777,655	28,734,704	2,137,859
1893	2,554,624	1,580,242	2,565,810	6,700,676	17,039,739	10,240,595	27,280,334	2,113,530
1894	2,460,086	1,516,672	2,370,355	6,347,113	16,010,732	9,850,768	25,861,500	2,390,026
1895	2,485,820	1,431,525	2,436,991	6,354,336	15,997,515	9,794,680	25,792,195	2,884,431
1895 compared with 1894—								
Increase	25,734 or 1·0 p.c.		66,636 or 2·9 p.c.	7,223 or 0·1 p.c.				494,405 or 20·7 p.c.
Decrease		85,147 or 5·6 p.c.			13,217 or 0·8 p.c.	56,088 or 0·6 p.c.	69,305 or 0.3 p.c.	
1895 compared with 1890—								
Increase								110,822 or 4·03 p.c.
Decrease	52,170 or 2·06 p.c.	7,594 or 0·5 p.c.	94,532 or 3·8 p.c.	154,296 or 2·4 p.c.	759,053 or 4·5 p.c.	721,211 or 6·9 p.c.	1,480,264 or 5·5 p.c.	

AGRICULTURAL Produce Statistics (Wheat, Barley and Oats) in Great Britain for the Years 1891, 1892, 1893, 1894 and 1895.

WHEAT.

YEAR.	Estimated total produce.	Acreage.	Estimated average yield per acre.
1891	72,127,263	2,307,277	31·26
1892	58,560,952	2,219,839	26·38
1893	49,247,297	1,897,524	25·95
1894	59,172,801	1,927,962	30·69
1895	35,441,025	1,417,641	25·00

BARLEY.

1891	72,129,095	2,112,798	34·13
1892	70,501,562	2,036,810	34·61
1893	59,535,377	2,075,097	28·69
1894	72,295,066	2,095,771	34·50
1895	64,988,370	2,166,279	30·00

OATS.

1891	112,386,261	2,899,129	39·11
1892	116,294,989	2,997,545	38·79
1893	112,887,379	3,171,756	35·59
1894	135,462,931	3,253,401	41·64
1895	121,948,485	3,295,905	37·00

The figures for 1895 in the last table are not official, but they have been compiled by competent persons after the most exhaustive inquiry, and may be taken for all practical purposes as absolutely reliable.

The one striking and significant change here shown is the enormous decrease in the area under wheat, and as there have been no compensating increases in other directions this will probably affect the number of farm hands. Between the years 1870 and 1890 there was a decrease of nearly a quarter of a million in the number of persons employed on the land, and there can be no doubt that a further great diminution has taken place since the last census. As I pointed out in my last report, agriculture is in scarcely better condition on the continent, and agriculturists are being forced to look abroad for a profitable field for their energies and capital. Whether they choose the Dominion or not depends in a great measure on the efforts made to direct them thither. Canada has difficulties and prejudices to contend with; her rivals are powerful and energetic, and it is only by unremitting work, which cannot be carried on without expenditure, that she can keep a foremost place.

It will not be necessary for me to go into details with regard to the office routine work. No effort has been spared by myself or my staff to further Canadian interests, and I can confidently say that as much good was accomplished as was possible with the means at my command.

The loan of magic lantern slides deserves special mention. Three sets were put in my charge last year, and during the whole of the lecturing season—until towards the end of April,—they were engaged every day, many applicants having to be disappointed. The season is once more opening, and from present appearances it will be quite as busy as the last.

It was a matter of general regret that the government was not represented this year at the Royal Agricultural Society's show, which was held at Darlington, and was attended by over 100,000 of (from a Canadian standpoint) the most desirable people in the country.

Emigration from the continent has continued to receive my special attention, and although our operations have been curtailed, they have been on the lines of former years. I am still strongly of the opinion that our chief hope of securing a large immigration of desirable classes suited for life in the far west lies in attracting them from continental Europe.

My relations with the steamship companies and the members of the press have continued to be of a cordial and intimate character, and I have to acknowledge much assistance from them in connection with my position as representative of Canada in this district. I must also thank my colleagues in this country and in the Dominion for their ready and courteous co-operation, special acknowledgments being due to the High Commissioner for many acts of kindness and consideration; and, before closing this report I wish to record my appreciation of the satisfactory manner in which my assistant Mr. G. B. Mitchell has carried on the operations of the agency through the rather prolonged period during which I was absent owing to ill-health.

I have the honour to be, sir,
Your obedient servant,

JOHN DYKE,
Canadian Government Agent.

No. 4.

REPORT OF BRISTOL AGENT, MR JOHN W. DOWN.

BATH BRIDGE, BRISTOL, 21st October, 1895.

To The Hon. T. MAYNE DALY,
Minister of the Interior.

SIR,—I herewith beg to present you with my annual report for the year 1895.

EMIGRATION.

During this season there has been no sudden rush of emigrants from this district, but a steady stream of really first-class settlers have left these parts for the Dominion of Canada. Emigration business now seems to have settled down, and will no doubt continue to work with something like regularity, unless some one or other of the British Colonies is brought to the front with a boom. Throughout England during the spring, emigration was reported to have been very slack, but upon comparing my books with previous years I find there is a slight increase shown this season in the number of emigrants from this neighbourhood in comparison with the annual average for the past five years. This year I was particularly busy far into the summer, and sent out some very good families as late as August and September. For the purpose of keeping in touch with the farming classes I have attended throughout the year large numbers of agricultural shows, ploughing matches, fairs, cattle markets, sales, etc., and taken every opportunity thus afforded for distributing the supplies of Canadian pamphlets sent to me. This method of keeping Canada well before the farming community has been attended with very satisfactory results, and has done a great deal towards increasing the correspondence with this office and enabling me to secure for Canada some of the best agricultural emigrants that have left the west of England for other countries this year. In the months of March and April many good families went right through to the North-west, and as they were a comparatively good stamp of farmers, with capital and experience, and still with plenty of years before them, I feel confident they have splendid prospects, and will no doubt in a year or two be followed by many of their friends in this country. I know of several instances of farmers, who went out to Canada from Somersetshire in March and April last, who have already written for their wives and families to follow them, and I have seen them away this month, giving them all information and assisting them in every possible way to enable them to reach their destination with as little trouble and expense as possible. Such facts as these are very gratifying and give plain evidence that emigrants are doing well in Canada.

CANADIAN EXHIBITS.

In the early part of the year I exhibited upon the Bristol Corn Exchange a sample of Canadian wheat, kindly sent me from the office of the High Commissioner, London. This grain attracted great attention and was carefully examined and discussed by hundreds of west of England farmers, millers and corn merchants. I am pleased to state that these exhibits were spoken very highly of, and were the means of bringing me into contact with a large number of influential men with whom, in the ordinary course of events, I should probably never have had an opportunity of speaking upon Canadian matters. I should like to have more opportunities of making similar displays of Canadian produce, as these little exhibitions of fruit, grain, etc., attract the attention

of an exceptionally good class of English farmers, men of capital and intelligence, who would prove invaluable settlers in any province of Canada.

LETTERS FROM CANADIAN SETTLERS,

The letters which I have received during the year 1893-94 from Mr. John H. Northcote, of South Edmonton, Alberta, and which were printed in very large numbers and distributed by Messrs. Allan Bros., did a great deal of good for Canada, leading to an extensive correspondence with farmers residing in the district of Sherborne, from which Mr. Northcote had left. On all occasions that I have received letters from Canadian settlers I have done my utmost to secure for same publication in the local newspapers. From time to time during the year I have received many letters from farmers and people interested in the sale of land in Ontario, New Brunswick and Nova Scotia, giving particulars of farms for sale. I have done my very best with such letters, placing them before all persons calling at this office for information upon these provinces, and I have also sent copies away in answer to inquiries for particulars of lands to let or for sale in Canada, and I trust that same has met with good results.

SCARCITY OF MONEY.

It is certainly a matter of some surprise that emigration has not shown a considerable falling off this year, looking to the fact that trade in all branches has been so terribly depressed. Immediately upon a revival of trade in this country, and when money is a little more plentiful, I am sure we shall see a very marked improvement in the emigration returns. A great drawback to emigration this year has no doubt been the scarcity of ready money among the farming classes. There are at the present moment hundreds of farmers residing in these western counties who have very little spare cash, if any, and others who have nothing but their stock to fall back upon, and which it is impossible to dispose of at the present time without incurring serious loss. If business generally in this country improves, and there certainly are signs of better times here, farmers would participate in the general rise of prices, and, finding themselves with a bit of ready money at their command, thousands would not hesitate to sell out their farms and make a fresh start in some one or other of the British colonies.

EMIGRANTS VIA NEW YORK.

A large number of the emigrants to Ontario and other parts of Canada reached their destination this year via New York, on account of the rates of the Southampton steamers being a great deal in favour of the American lines. Consequently such emigrants will be placed in the emigration returns as United States emigrants. In this way the number of emigrants to the United States from this country will be somewhat exaggerated. Also I find, owing to these extremely low rates, thousands of American citizens have visited England this year and returned as steerage passengers, and will be, I am informed, classed as ordinary emigrants.

EMIGRATION PROSPECTS.

My experience of many years in emigration matters teaches me to anticipate a great increase in emigration to Canada during the ensuing year. During the summer thousands of Canadians have visited England, and no doubt have left very favourable impressions of Canada wherever they went. I have always observed that when there has been an exceptionally large arrival of Canadians in this country, the following year has seen a correspondingly large emigration, arising no doubt from the influence of the Canadian visitors. This year has certainly seen one of the largest arrivals of Canadians in this country that was ever known. From all the Canadians who visited this office

this year I did not find a single complaint, but on the contrary all of them expressed themselves entirely satisfied with their prospects in the Dominion, and stated their intention to do all they could to induce their relatives and friends in this country to pay a visit to the Dominion to see for themselves what advantages that country offered for successful farming, mining and general business.

RATES OF PASSAGES.

I am very pleased to find the steamship companies have at last come to terms between themselves and arranged a system of uniform rates of passage to Canada and the United States. The rise in the rates will for a time somewhat check emigration, but coming into operation at the end of the season, it will not be so serious as it might have been had this change taken place early in the year, and by next spring these rates will have become well known ; and although there has been an advance of about £3 I do not think it will very much tend to retard emigration, especially if trade revives in this country, and more money is in circulation. This rise in the rates is decidedly in favour of the Canadian route, and I already find considerably more inquiries for passages by the Quebec lines than by the steamers running to New York. The Canadian lines have now a slight advantage for passengers to all parts of Canada, also to several parts of the Western States which will induce many returning Americans, and also emigrants to the United States, to give preference to the Canadian lines.

APPLICATION FOR PAMPHLETS, ETC.

This year has been an exceptional one as regards the number of applications I have received from the country for maps, pamphlets, etc., relating to the Dominion of Canada. In fact I do not ever remember having received so many inquiries during the spring and summer of any previous year. The inquiries from Wales more especially have been very numerous, and I fully expect a brisk emigration next spring from the agricultural districts of Monmouthshire, Glamorganshire and Carmarthenshire.

SUCCESSFUL EMIGRANTS.

Early this spring I spent out to Canada several young men, and have done my best to keep in touch with them by correspondence during the year, and I am pleased to state that several of them have done so well that they have written home for many of their friends to follow them. One instance I may mention of a young man who went out to British Columbia last spring, and who has since sent home sufficient money to pay the passage of his sister and brother, who are already on the road to Vancouver.

MORE PAMPHLETS WANTED.

I strongly advise a large distribution of pamphlets, leaflets, etc, early the ensuing spring at county fairs, agricultural gatherings, etc., throughout England, which I have no doubt would result in Canada getting a gratifying proportion of the anticipated large emigration of the coming year 1896.

I have the honour to be, sir,
Your obedient servant,
JOHN W. DOWN.

No. 5.

REPORT OF GLASGOW AGENT.

(Mr. Thomas Grahame.)

40, St. Enoch Square, Glasgow, 22nd October, 1895.

To the Honourable
Sir Charles Tupper, Bart.

Sir,—I have the honour herewith to submit this my twenty-fourth annual report.

GENERAL OPERATIONS.

As usual during the winter months of the year I took all opportunities of meeting with people at fairs, shows, markets, &c., with the view of disseminating information regarding the various provinces of the Dominion, and advising those who had made up their minds to go out, as to the best course for them to pursue.

I have likewise met large numbers of people by arrangement here, and have had many applications by letter from people of a suitable class to go out, some going this year and others proposing to go in early spring next year.

FEMALE DOMESTICS.

There were a few female domestic servants who called, but those of a suitable description of that class are getting rather scarce in this country, and the best chances for obtaining such is in the case of the emigration of families where there are grown up daughters.

PARTS OF CANADA INQUIRED ABOUT.

As a rule the inquiries I had made of me were chiefly in respect to British Columbia, the North-west, and Manitoba, though there were numerous instances of people wanting information respecting the older provinces also, and more particularly in regard to fruit farming.

MATTERS OF TRADE, &C.

Very many of those calling here for information, and by correspondence also, were desirous of being informed on all sorts of subjects besides emigration, such as matters pertaining to trade of various descriptions, and those interested in shooting, fishing, &c.; and inquiries of this description I may say are increasing in number from year to year.

DISTRIBUTION OF PAMPHLETS.

A very good and full supply of our literature of all descriptions has been sent to me from time to time, and I have seen to the distribution of it to best advantage, sending quantities of it to various steamship agents throughout Scotland, to mechanics' institutes, reading rooms, free libraries, &c., as well as continuing the arrangement with Messrs. J. & A. Allan, for the distribution through their agents of numerous pamphlets, &c., at the chief hiring fairs, shows, &c. By these means the most desirable classes of the community are reached, so far as giving them the opportunity for obtaining infor-

mation is concerned. The Scotch tenant farmers' delegates reports have been in great request as in former years, and I may say I frequently come in contact with many of these gentlemen, and as in the past they continue to take a great interest in all matters pertaining to our various provinces.

ADVERTISEMENTS IN THE PRESS.

I was very much pleased to learn from you of the sum you propose to place at my disposal for the purpose of advertising the advantages of Canada in the press of this country during the coming winter. I have no doubt this will be productive of a great deal of good in inducing a large number of people of the most satisfactory class to go out and settle in our various provinces.

AT THE HIGHLAND SOCIETY'S SHOW.

At the Highland Society's Show at Dumfries, and at the room which I engaged in the town under your authority, I saw large numbers of farmers and others with whom I had conversation on all sorts of subjects pertaining to Canada, as well as emigration, acting in conjunction with Messrs. Stuart, Fleming and Fraser, and I also saw to the distribution of quantities of our literature. Among others whom I saw, and with whom I had conversation, were Professor McCall of Glasgow ; Messrs. David Riddell, a great breeder of horses, and largely interested in Canadian affairs ; Osler of Dundee, connected with the Dundee *Courier* ; Watt, of Messrs. Little and Ballantine, Laurie, Roxburghshire ; Nicholson, Stapleton ; Patterson of Terrona ; Cunningham, Farbreoch ; Little, a retired farmer with a number of sons ; Hutchinson, of Dundee ; Howatson, Glenbuck ; Gillespie, Mousewald ; Johnstone Douglas, Comlongan Castle ; Toppin of Skelton ; Vivers Dornoch ; Gordon of Newton ; all of whom are farmers, some connected with the Highland Agricultural Society, and all interested in our country, and in numerous instances having sons or friends who think of going out to some new country. I had a long conversation also with Mr. George Armstrong, Newhouse Hollywood, a gentleman of considerable capital, and who has a daughter married in the North-west. He intends going to Nova Scotia this autumn with a view of settling there with the remainder of his family. I likewise saw numbers of others of a similar description. I saw also at Dumfries Messrs. Elliott and Speir, lately tenant farmer delegates to Canada, and had conversations with them in connection with emigration in which they continue to be very much interested. I had several conversations with Mr. Fraser, in regard to Ontario particularly, and found him to be extremely well informed on all subjects interesting to people who want to get a knowledge of affairs in Canada, he being particularly well posted in regard to the Gaelic settlements in that province.

THE STEAMSHIP COMPANIES' AGENTS.

As formerly I continue to be on the most friendly terms with the various steamship companies which are connected with Canada in this country, we mutually supplying each other with any information which comes to our knowledge which may prove of importance to the interests of our country, always supplying them with quantities of our literature as they may require them, thus producing very good results in the case of passengers going out to our various seaports.

THE CANADIAN PACIFIC RAILWAY.

Becoming more apparent from year to year are the great advantages which have accrued to Canada from the construction of the Canadian Pacific Railway and its various branches. This year attention has been more particularly called to it from the immense grain crop produced in the North-west and Manitoba, and the strenuous efforts

that company has been making to meet the emergency in the transport of the surplus products to the seaboard, and now it is not only for grain from these districts that carriage is required to the seaboard, but for cattle, dairy produce, &c.

CANADIAN VISITORS TO SCOTLAND.

As usual I have had a large number of Canadians calling upon me for information of all descriptions, some referring to emigration, and others to many matters pertaining to trade, travelling in this country, &c., &c. In all cases I have done my utmost to satisfy the inquiries of those who came, and they are constantly increasing in number from year to year. Mr. Young from Virden, Manitoba, I may say called repeatedly here, to whom I gave quantities of our literature at various times for the purpose of distribution among his friends and relations with a view to emigration.

SCOTCH EMIGRATION.

In regard to Scotch emigration during the past season, the reasons which have produced a very considerable effect upon it are the following: the low prices for all description of productions, and dulness of trade prevalent in Canada last season.

THE STEAMSHIP SERVICE.

A larger proportion of Scotch emigrants sail from Liverpool than formerly, there being more competition at that point, and there being only the one line for emigrants for Canada direct from Scotland, and the sailings not being so frequent as in former years. They used to have a weekly service during the early spring and summer months up till the last few seasons, but now they sail irregularly every two or three weeks, as the case may be, as they say it would not pay them to have passengers by weekly service, and this has a tendency to increase the number going by other lines. I may say also a considerable number of passengers go to various points in Canada via lines going from Glasgow to United States ports.

FARM LABOURERS DRIFTING INTO THE TOWNS.

The farm labourers are also continuing to go in large numbers from country work to occupations of various descriptions in the towns, thus rendering their numbers less in most districts in the agricultural parts.

AGRICULTURAL DEPRESSION.

Agricultural depression is at present very prevalent in almost all parts of Scotland. Although the grain crops have been fairly good in many parts of the country, prices still rule very low, and in respect to prices for dairy products they have come down very much during the last season. Potatoes also, though a fair crop, owing to the immense quantities brought from abroad, are bringing very low prices, so that taking all matters into consideration the agricultural interests are in a very despondent condition. The only point in regard to which there is any glimpse of improvement is the extra demand for store stock since the exclusion of Canadian cattle from being distributed throughout the country.

CHARACTER OF EMIGRANTS.

As in the past, in every way I continue to do all in my power to prevent unsuitable persons from going out to our various provinces, such as people who have no knowledge of agricultural pursuits, and who have no means, as well as those who are only accustomed to sedentary occupations, and I have many applications from these classes.

FUTURE PROSPECTS.

It is difficult to forecast to any accurate extent what the prospects for next season may be, but the splendid crops which have been so prevalent in Manitoba and the North-west this season will have an undoubted effect upon the promotion of emigration next year. Many people resident there have been writing to their friends in the most hopeful and satisfactory manner, and there have been very numerous references in the press of this country to the prosperity existing in consequence of the bountiful harvest. Although prices have not been what could be wished for, still the enormous quantity produced will to a very great extent compensate for this, and then the fact of farmers having gone so much more extensively into mixed farming has proved very beneficial to them.

LETTERS FROM A YOUNG SCOTCH SETTLER.

I may say that the extracts from the letters of a young Scotsman near Prince Albert which appeared in the *Canadian Gazette* from time to time of late, with your approval, and the manuscript of the greater portion of which I sent to you, have proved very attractive reading to many people, and will I think be productive of very good results.

THE OUTLOOK.

Trade in this country is in a very uncertain condition at present, and although there have been improvements in some industries they have been very slight so far as I can learn.

Taking all things into consideration I think we may look forward to a very considerably increased emigration next season, and of the classes most suitable for settlement in our country, from the inquiries I have had made of me. I think it is inevitable that a considerable number of those engaged in farming pursuits in this country, or their sons, must very soon go to some new country, and I do not see any good reason why we should not get a fair share of that emigration. A good many people with a fair amount of capital have made application to me with the intention of going out to some one of our various provinces next season, and I have no doubt I will have many other similar ones before next spring.

CONCLUSION.

As in the past I continue to be under great obligations to yourself and staff for affording me information on all kinds of subjects which may be of use to me in the performance of my duties.

I have also as formerly had the greatest courtesy afforded to me by the press of this country in any matters in which I may come in contact with members of it in connection with the interests of Canada.

I have the honour to be, sir,
Your obedient servant,

THOMAS GRAHAME,
Canadian Government Agent.

No. 6.

REPORT OF SPECIAL AGENT IN THE MIDLAND COUNTIES OF ENGLAND

(Mr. Ernest J. Wood.)

78, Beaufort Road, Birmingham, 21st October, 1895.

The Honourable
The High Commissioner for Canada,
17, Victoria Street, London, S.W.

Sir,—I have the honour to submit my report for the period extending from January 1st to October 21st dealing with my work in connection with emigration from the Midlands to Canada.

My work has been carried out on the following lines, viz. :—

VISITS TO MARKET TOWNS, FAIRS, STOCK SALES, ETC.

The following list gives 49 fairs, etc., visited by me, viz. :—Coleshill (2), King's Norton (3), Warwick (3), Water Orton (2), Hampton-in-Arden (2), Nuneaton (3), Rugby (2), Coventry (2), Rugeley (2), Solihull, Lichfield (2), Alcester (2), Kidderminster (2), Hagley, Stratford-on-Avon, Birmingham, Bromsgrove, Knowle, Northfield, Evesham, Gloucester, Bridgnorth, Wolverhampton, Athorstowe, Ragley, Tamworth, Bromyard, Market Drayton, Ashbourne, Saltley, Hinckley, Norwich, Ely, Wrexham.

Many of these were important agricultural shows, horse shows, cattle shows, flower shows, etc., and where I had good opportunities of conversing with farmers, and especially farmers' sons, regarding Canada, giving away pamphlets, exhibiting cereals, and endeavouring to create feelings of interest in the opportunities of obtaining land on easy terms in the North-west.

A COURSE OF ILLUSTRATED LECTURES ON CANADA.

The following list gives 36 lectures delivered by me, viz. :—Red-ditch (the Institute), Aston Evening Classes for Adults (3), Birmingham Sunday Lecture Society (3), Sparkhill (the Institute), University College, Nottingham (Popular Lecture), Clifton College (Great Public School), Cheltenham College (Great Public School), King's School (Warwick), King's Heath (the Institute), Birmingham Young Men's Christian Association, Leicester, Young Men's Christian Association, Milborne Port, Buckhorn Weston, South Cheriton, Heustridge, Wolverhampton, Macclesfield, Hereford, Marden, Lincoln (2 lectures per request), Langley (the Institute), Bilston (the Institute), Upper Highgate School (Birmingham Evening Classes for Adults), Cheltenham, Harborne (the Institute), Tindal Street School (Evening Classes for Adults), Feltwell (Agricultural Laborers' lecture per special request), Bridgnorth (Grammar School), Sherborne School (Great Public School), Stalbridge (schools in district), Stalbridge (farmers' lecture per request.)

All these lectures (press reports of which have been inclosed from time to time in my monthly reports) have been illustrated by lime-light views entirely free of cost to the government, owing to arrangements I was able to make with representative gentlemen in the various districts, as also with the head masters of the great public schools, grammar schools, and elementary schools. They have been in most cases public in their nature, as at the schools generally parents of the boys and the public have been invited by the head masters to be present as well as the boys themselves.

INQUIRIES, INTERVIEWS, AND CORRESPONDENCE.

Owing to no advertisements being inserted last spring in the press in my district, and to the bad crop reports in the North-west for the year 1894, inquiries were not many in the spring, but since the reports of the good harvest in the North-west are becoming known, I have experienced an unusual increase in inquiries and interviews at this time of the year; my correspondence has been large owing to the arrangements of my lectures and to the endeavours I have made to locate desirable settlers in Canada prior to their leaving England or as soon as possible on arrival, which I consider to be a most important part of my work.

SETTLERS WHO HAVE EMIGRATED TO CANADA.

I have from time to time inclosed in the monthly reports lists of names of settlers who have gone out through my efforts to my personal knowledge. These amount to 310 in number, being by far the most I have been instrumental in settling in Canada. It is impossible to give any accurate estimate as to the total number, since many leave through efforts made without any practical evidence of their departure from the Midlands. I am of opinion that the 310 persons would take an aggregate capital of £80,000 to £100,000, as many of them were possessed of large means, being the best class of settlers with whom I have thus far been called upon to deal. My own experience, as far as the Midlands are concerned, is that there has been a marked increase in emigration.

REASONS FOR GENERAL DECREASE.

By your request I had the honour to submit a special report, dated May 9, 1895, dealing with the decline in emigration from Great Britain as compared with the corresponding period of 1894. The following are the chief causes as enumerated, viz.:—Unprecedently low prices of agricultural products, etc., adverse reports in the press, rapid fall of C. P. R. stocks during the winter 1894-95, general depression, faulty compilation of Board of Trade returns.

EMIGRATION AN EDUCATIONAL MATTER.

It will be noticed in the list of my lectures that the majority of them have been given at the schools, and many at the leading public schools of Great Britain. Experience has led me to the conclusion that the best results are to be attained by educating through these lectures young men and boys leaving school in the advantages of settling in Canada, before they start out in life. Headmasters of these schools have evinced a really remarkable interest in the Dominion generally, and I am in a position to say that many of them have assured me that they shall certainly advocate emigration to Canada in connection with any of their scholars leaving for the colonies. This is an agency of inestimable value to the Dominion, when it is considered a large number must necessarily leave England for the colonies. Again, it should be borne in mind that the young men and boys to whom these lectures are given belong to the wealthy classes of this country, and who take with them considerable capital; moreover, owing to the limited expenditure allowance at my disposal, it is impossible to give many lectures when attended with the ordinary expenses attached to them, whereas these lectures, to which I have referred, are attended with hardly any expense to the government. I inclose, among others, expressions of opinion by the headmasters of four great public schools, viz., Uppingham, Cheltenham, Clifton and Sherborne.

CONCLUSION.

I am deeply indebted to the headmasters of the schools, generally, and to the clergy for the interest which they have shown in my work, and the assistance which

they have given to me; also to the steamship agents in the Midlands for their co-operation. I cannot thank you, sir, enough for all the kind interest you have evinced in my efforts since I commenced my work in England in 1893, and which has encouraged me in its prosecution. I must also thank Mr. Colmer and Mr. Reynolds especially, and the staff of your office generally for many valuable suggestions, useful advice and unvarying courtesy. My thanks are also due to the Department of Interior for statistical and other information sent to me from time to time.

I trust my report will meet with your approval.

I have the honour to be, sir,

Your obedient servant,

ERNEST J. WOOD.

Copies of letters from Headmasters of Public Schools, appended to Mr. Ernest J. Wood's Report.

SCHOOL HOUSE, UPPINGHAM, March 16, 1894.

Mr. Ernest Wood, late member of the Parliament of Manitoba, has delivered a very instructive and interesting lecture on Canada to the boys of Uppingham School, who listened throughout with some degree of enthusiasm and with careful attention. Mr. Wood is quite master of his subject in its latest details.

E. C. SELWYN, M.A.,
Headmaster of Uppingham School.

THE COLLEGE, CHELTENHAM, Feb. 7, 1895.

Mr. Ernest J. Wood delivered a lecture here last evening on Canada, to the College. It was interesting, full of information and well delivered, and I am sure that the boys liked it and that it would be most helpful and suggestive to any of them who were contemplating a colonial career. The lantern slides, by which it was illustrated, were apposite and striking.

HERBERT A. JAMES,
Principal.

CLIFTON COLLEGE, BRISTOL, Feb. 25, 1895.

Mr. E. J. Wood gave a lecture to the school a few days ago upon Canada. Hi magic lantern slides were good and the matter and tone of his address decidedly attractive. The boys were much interested and I feel sure they gained some valuable instruction.

M. G. GLAZEBROOK,
Headmaster of Clifton College.

SCHOOL HOUSE, SHERBORNE, DORSET, Oct. 18, 1895.

Mr. E. J. Wood gave us a highly interesting lecture here last night upon "Canada." As a settler himself, he spoke from first hand knowledge and very adequately set before us the vast resources of the great dependency. In subsequent conversation I learned from him much that was most interesting about the "settler's life," and I have suggested that Mr. Wood should lecture on his own personal experiences. It could not fail to be most interesting. As it was, although I know something of the country myself, I learned a good deal that I did not know before.

F. B. WESCOTT,
Headmaster of Sherborne School.

No. 7.

REPORT OF SPECIAL AGENT IN THE LOWLANDS OF SCOTLAND.

(Mr. Peter Fleming.)

44, High Street, Dundee, October, 1895.

The Hon. Sir Chas. Tupper, Bart., G.C.M.G., C.B.
High Commissioner for Canada,
London.

Sir,—I have the honour to submit a report of my work on behalf of immigration to Canada during the current year.

METHODS OF WORKING.

During the year I have adopted the same methods of carrying on my propaganda on behalf of Canada, which from experience of former years I have found so successful in drawing the purely agricultural classes to my meetings. I have the latest valuation rolls of the principal counties, and send out invitations addressed personally to the agriculturists, farm servants, &c., whom it is my special business to get interested in Canada, with a view to their ultimately settling there, and taking advantage of the inducements held out by the Government to those of this class to settle on their own homesteads. Finding this method—addressing the people personally, and in this way keeping clear of the undesirable urban classes—was so successful, I have recently provided myself with the rolls of another two counties, viz., Perth and Sterlingshire, in which counties I will immediately commence active work. Thinking it would interest, as well as give a practical demonstration of what life is on the prairies, I have just got a number of magic lantern slides prepared, the original pictures of which are to be found in the official pamphlet entitled "Emigration to North-western Canada," and the "Western World," of which latter most excellent publication I receive a supply regularly from Ottawa.

These slides illustrate the small beginnings of the new settler, the log shanty, log house and so on to the more pretentious 6 or 8 roomed frame house; also a bullock wagon, a team of oxen ploughing, and gradually developing to the sulky plough.

In this way practical illustrations are placed before the people here, which will tend to rivet firmly in their minds the facts which I also place before them.

At my meetings I hand to each one of my audience the latest official publications, and in this way I have scattered a large quantity of literature throughout my district, in addition to the quantities which have been sent to the applicants by post.

104 MEETINGS HELD.

During the past ten months I have had meetings at the undermentioned (104) places in my district, at which, with a few exceptions, I have had good average audiences, viz:—Loggniddry, Haddington, East Linton, Innerwick, Grant's House, Berwick, Greenlaw, Duns, Reston, Drem, Dirleton, North Berwick, Cockburnspath, Dunbar, Kinross Junction, Milnathort, Strathmiglo, Auchtermuchy, Ladybank, Dairsie, Springfield, Cupar, Maud Junction, Insch, Gartly, Rothiemay, Cornhill, Kennethmont, Huntly, Glashiels, Selkirk, Peebles, St. Boswells, Jedburg, Kelso, Hawick, Reddings Junction, Langholm, Annan, Kirtlebridge, Lockerbie, Aberchirder, Turriff, King Edward, Auchterless, Fyvie, Rothienormen, Macduff, Banff, Cuminestown, Lochee,

Alyth, Meigle, Ardler, Forfar, Guthrie, Arbroath, Monifieth, Carnoustie, Dalrymple, Maypole, Barrhill, Dailly, Girvan, Dunraggit, Port Patrick, Stranraer, Drummore, Glenluce, Newton Stewart, Garliestown, Castle Douglas, Lochmaben, Moffat, Dumfries, Newtyle, Alyth, Glamis, Forfar, Tannadice, Brechin, Edzell, Montrose, Ardler, Coupar Angus, Carr Bridge, Grantown, Elgin, Craigellachie, Dufftown, Keith, Buckie Cullen, Portsoy, Cornhill, Banff, Turriff, Montrose, Johnshaven, Bervie, Hillside Inverkeillor, St. Cyrus, Carnoustie.

NOT A GOOD YEAR FOR EMIGRATION.

The early part of the present year has not been by any means a favourable one for emigration—especially is this the case in regard to the most desirable class, the agricultural labourer and the small working farmers.

The exceptionally severe winter, the intense and protracted frost accompanied by a succession of storms which prevailed during the months of January, February and the greater part of March, the absence of those intervals of fresh open weather to which we have been accustomed, and during which a great part of the ordinary spring work is usually performed, had the effect of delaying the work of preparing the soil and putting in the crops for several weeks beyond the usual time, and in consequence a large part of the spring work remained to be done after the Whitsunday term. Instead of paying off hands as is usually done at this term our farmers were under the necessity of engaging additional help, with the result that an exceptionally great demands arose for farm labourers—wages (which at the previous hiring term showed a decided backward tendency) were increased to such an extent that farm labour, which used to be the lowest paid of any, is now about the most highly paid. Good men readily obtained from £36 to £40 per annum with board—a rate which would have been considered exorbitant by themselves a few years ago.

In view of these circumstances the falling off in the emigration of this class to Canada is easily accounted for. One thing is certain—if they have not gone to Canada they have gone nowhere else.

EMIGRATION TO THE STATES.

The increase in emigration to the States is, I think, accounted for from the fact that the rates of passage, being exceptionally low, induced a large number of unskilled town labourers and textile workers to leave for the United States, and as these low rates applied to both sides of the Atlantic, large numbers of workers in America were induced to visit this country—they getting return tickets for about £4 each. No special note being made of these on their return either by the shipping companies or the emigration authorities when making up their statistics, they go to swell the number of emigrants reported as having left this country.

NOT A DESIRABLE CLASS.

In regard to the unskilled and textile workers referred to, they are not a particularly desirable class, and Canada is much better off without the doubtful distinction she would receive were such a class to be drafted to her ports. Few of these people can boast of having over $15 in their possession when they reach the United States. There has certainly been no increase in the purely agricultural element going to the United States or elsewhere this season. They are still with us, and I cannot think that we will have long to wait for a new exodus to Canada.

Meantime all that can be done is to clear away the existing misconceptions which affect the minds of many people in this country regarding Canada—have the sails set and everything in position to catch the breeze when it comes.

THE ATTITUDE OF THE PLOUGHMEN.

The chief difficulty is in getting farm servants in this country to realize the possibility of their being in a position within a few years of their arrival in Canada to acquire a homestead of their own, 160 acres in extent, with sufficient capital to start farming on their own account. A condition of things which renders this possible is scarcely conceivable by the ordinary ploughman of this country. Those of that class who have been exceptionally saving and industrious, and who have tried the experiment of farming on their own account, have not as a rule improved their condition to any great extent. When small farms or moderately sized crofts come to be let the rents obtained for them are so high that it requires the hardest work combined with the strictest economy to make a bare living out of them. The thought of occupying a homestead of their own does not therefore possess the charm for our ordinary agriculturist that it ought to have. They know that to stock a farm of 160 acres in this country necessitates a capital of from £1,200 to £1,500, and it is difficult for them to grasp the idea that in Canada one tenth of that sum is sufficient to make a fair start.

HOW THE TRUE STATE OF THE CASE IS PUT BEFORE THEM.

With the view, therefore, of placing the actual facts before them, I have had culled from the official pamphlets the figures given as to the cost of breaking, backsetting, seeding, harrowing, shocking, threshing and marketing wheat, and profits derived therefrom, which I place before them at my meetings, and circulate in leaflets among my audiences. This I regard as the most important part of my work.

HIGH WAGES NO LONGER AN INDUCEMENT TO EMIGRATE.

Hitherto the high wages which for many years prevailed in all our colonies formed the chief attraction to emigrants, but during the two past years wages have had a downward tendency in all our colonies as well as in Canada, and a very decided upward direction in this country; now they are all but equalized, consequently the inducement of high wages has lost its former force and effect.

"OWN YOUR OWN HOME," THE PRESENT CRY.

I have, therefore, in view of this, directed my efforts to the work of placing before them the opportunities which Canada offers to those who wish to create homes for themselves (see circulars "What Farm Servants can do in Canada" and "Letter to Small Farmers," copies of which were sent you when issued).

INFLUENCE OF THE SPLENDID CROP IN MANITOBA.

The abnormally large crop which has been obtained in Manitoba this season, together with the increased price of wheat, will no doubt be helpful in directing the attention of farmers and others of the agricultural class in this country to Canada, and I shall take care that these and other similar facts regarding the colony are not lost sight of.

I have the honour to be, sir,

Your obedient servant,

PETER FLEMING.

No. 8.

REPORT OF SPECIAL AGENT IN THE NORTH OF SCOTLAND.

(Mr. W. G. Stuart.)

Inverness, 23rd October, 1895.

To the Honourable
Sir Charles Tupper, Bart.,
High Commissioner for Canada.

Sir,—In compliance with instructions received from you, I now beg to submit the following report regarding the work done in connection with my agency during the last ten months. For the sake of clearness I might classify the work done under the following heads :—

I.—LECTURES ON CANADA.

I have found the method of conveying information by means of illustrated lectures by far the most effective way of reaching the great bulk of the people, and getting in touch with them on emigration matters. Accordingly, I have embraced every opportunity of bringing Canada in this way before the public. Owing to the extraordinay severity of the weather in the North of Scotland during the early winter months I was considerably handicapped in mv movements, but in all I delivered 138 lectures in 103 parishes or towns, situated in 17 counties. The lectures were, with one or two exceptions, illustrated by lantern slides, and the arrangements were made with a strict regard to economy. I have, as heretofore, delivered a number of addressess under the auspices of literary societies, church guilds, and evening school continuation classes, in the principal towns ; but unless specially invited, and a hall is provided, I avoid the large towns for lecturing purposes, because of the expense of arranging meetings and the difficulty of getting the right people to attend. The country parishes provide the best field for successful work, and in other respects the class of emigrants are more desirable.

I can only estimate approximately the numbers present at the meetings held during the last ten months ; but I hardly think I am over-estimating the total at 21,000—an everage attendance of 152 at each meeting.

The following list gives the places where lectures were delivered :—

Parish or Town.	County.	Place of Meeting.
Elgin	Morayshire	Evangelistic Hall
New Elgin	do	Public School
Kinloss	do	do
Rafford	do	do
Dallas	do	do
Urquhart	do	do
Dunphail	do	do
Drainie	do	do
Cromdale	do	do
Darnaway	do	do
Grantown	do	do
Burghead	do	do
Dyke	do	Parish Church.
	do	Public Hall.

LIST of places where lectures were delivered—*Continued.*

Parish or town.	County.	Place of meeting.
Newmill	Banffshire	Public School.
Sillyean	do	do
Glenlivat	do	do
Ballindalloch	do	do
Knock	do	do
Aberlour	do	do
Rothiemay	do	do
Cawdor	Nairnshire	do
Auldearn	do	Public Hall.
Ardclach	do	Public School.
Abernethy	Inverness-shire	Volunteer Hall.
Aldourie	do	Public School.
Fortaugustus	do	Public Hall.
Carr Bridge	do	do
Inchmore	do	Public School.
Kirktown	do	do
Petty	do	do
Croy	do	do
Dorback	do	do
Rothiemurchus	do	do
Kincardine	do	do
Alness	Ross-shire	Public Hall.
Ardross	do	do
Avoch	do	Public School.
Auchmore	do	do
Killin	do	do
Contin	do	do
Fearn	do	Public Hall.
Fortrose	do	do
Invergordon	do	Town Hall.
Munlochy	do	Volunteer Hall.
Kiltearn	do	Public School.
Inver	do	do
Arpafulie	do	do
Drumsmittal	do	do
Lochalsh	do	do
Plockton	do	do
Lochbroom	do	do
Ullapool	do	Volunteer Hall.
Ardvean	do	Public School.
Scoraig	do	do
Bordbuie	do	do
Attadale	do	do
Resolis	do	Public Hall.
Cullicudden	do	Public School.
Ferintosh	do	do
Strathpeffer	do	Public Hall.
Marybank	do	Public School.
Leckmelny	do	do
Brora	Sutherlandshire	Temperance Hall.
Bonar Bridge	do	Public Hall.
Loth	do	Public School.
Lairg	do	Volunteer Hall.
Kildman	do	Public School.
Rosehall	do	do
Shiness	do	do
Foss	Caithness	do
Farr	do	do
Westerdale	do	do
Canisbay	do	do
Dunnet	do	do
Latheron	do	do
Lannergil	do	do
Castletown	do	Public Hall.
West Watten	do	do
Downreay	do	do
Costa	Orkney	Church.
Birsay	do	Public School.
Finnstown	do	do
Stennis	do	do

LIST of places where lectures were delivered—*Concluded.*

Parish or town.	County,	Place of meeting.
St. Andrews	Orkney	Public School.
Evie	do	do
Tankerness	do	do
Orphir	do	do
Dunrossness	Shetland	Baptist Church.
Sandwick	do	Parish Church.
Quarff	do	Public School.
Bressay	do	do
Roe	do	do
Nesting	do	do
Delting	do	do
Twatt	do	do
Tresta	do	do
Mid Yell	do	do
Burravoe	do	do
Cullivoe	do	do
Westsandwick	do	do
Ulsta	do	do
Brae	do	do
Aberfoyle	Perthshire	do
Aberdalgie	do	do
Abernethy	do	Public Hall.
Logierat	do	Public School.
Ballinling	do	do
Pitlochry	do	do
Weern	do	do
Dull	do	do
Monlin	do	do
Kenmore	do	Public Hall.
Thornhill	do	do
Stirling	Stirlingshire	do
Logie	do	Church Hall.
Bannockburn	do	Town Hall.
Bridge of Allan	do	do
Peebles	Peeblesshire	Church Hall.
Eddleston	do	Public School.
Selkirk	Selkirkshire	do
Ettrick Bridge	do	do
Kirkhope	do	do
Ettrick	do	do
Yarrow	do	do
Yarrowford	do	do
Ancrum	Roxburghshire	do
Sandystones	do	do
Morebattle	do	do
Bedrule	do	do
Belsis	do	do
Kirkoswald	Ayrshire	do
Townhead	do	do
Alloway	do	do
Dunragit	Wigtonshire	Creamery Hall.
Mount Pleasant	Dumfriesshire	Public School.
Gretna	do	do
Ecclefechan	do	do
Hoddom	do	do

II.—WORK AT MARKETS, SHOWS AND CATTLE SALES.

During the summer and autumn I have attended the principal markets, and have met a large number of farmers and agricultural labourers who wished to have detailed information about the resources of particular districts in Canada, and the methods of farming, &c. Besides personally distributing pamphlets of all kinds, I have exhibted samples of Canadian wheat, oats and barley, and the examination and criticism of these awakened an interest in the country that often led to practical results.

I have been in attendance at 48 markets, shows or sales at the following places:—Inverness, 11; Elgin, 9; Forres, 4; Nairn, 3; Grantown, 3; Banff, 2; Dingwall, 2; Dumfries, Keith, Dufftown, Aberlour, Cawdor, Fortrose, Kingussie, Tain, Invergordon, Georgemas, Wick, Castletown, Thurso, Kirkwall.

III.—DISTRIBUTION OF LITERATURE.

I have been regularly supplied with pamphlets, hand-books and other varieties of emigration literature, and these I have distributed to the best advantage to those attending my lectures, at markets and shows, and on the trains and steamers. I have also kept up the practice of supplying attractive hand-books to the railway waiting rooms. I receive a large number of inquiries for pamphlets by post, especially the Scotch delegates' reports and the illustrated official hand-book, while the Gaelic pamphlet still continues to be very much in demand.

IV.—LECTURES, &C., IN THE BOARD SCHOOLS.

I have to report that there is an increasing demand by the teachers of the board schools for hand-books and delegates' reports, to be used as readers, while the large railway map is now hanging on most of the walls in the schools in my district. In connection with the evening continuation classes, now so common in the country districts, I have frequently delivered illustrated lectures, and I have also lent my set of slides to the teachers for a like purpose. As the best and most ambitious of the young men attend these classes, I am confident the information they acquire of the extent and resources of the Dominion will have beneficial results.

V.—PRESS NOTICES.

I have, as opportunity offered, contributed letters and articles to the press, and with one or two exceptions the northern newspapers are most willing to give publicity to information supplied to them about Canada. From the cuttings attached to my monthly reports you will doubtless have observed how fully and favourably they notice my lectures and other efforts to promote emigration.

VI.—LETTERS FROM HIGHLAND SETTLERS.

As you have emphasized the importance of the assistance that might be rendered to emigration by settlers from the old country who are getting on well in their new homes writing to their friends on this side, giving their experiences and advice, I have asked a number of the emigrants who have gone out recently from the Highlands to write and let me know how they were getting on. I have received a number of letters during the year, and I quote from one recently received from Mr. A. Urquhart, The Glen, Lacombe Alberta:—

"My dear Mr. Stuart.—I believe I should have written you before now, but time for writing we did not have since coming here, but now that we have seed in, and fenced our stock, and selves housed and feeling at home, and time for haymaking not yet, we must send a few sheets across the Atlantic * * * * * Lacombe is about half-way between Calgary and Edmonton and being advised to stay off there and see the land we did so, and stayed. We have each taken a homestead and I have also taken 160 acres of Canadian Pacific Railway land. It is quite a good country, hill, lake, stream, and valley and timber for building, fencing, and fuel in abundance, at least for some years. The land is in a place called Long Valley, 10 miles east of town. It is quite level prairie, with a creek running through it. The soil is good, rich, and I think all that could be desired. We have broken and seeded about 20 acres; we have a nice garden sown with quite an experimental variety of seeds.

We have houses built; we have eight cows, all to calve next spring; we have four horses, about fifty hens, including the chicks, a couple of steers, three hogs. We make our own butter and have lots of milk, and on the whole we have done fairly well, and hope to do better. What a wilderness our place seemed when first we came to it, but now it is quite farm-like and we feel at home. It is a ranche in size, and when we get it all fenced in we will soon turn it up. I like the life well * * * * * This is certainly a glorious country for cattle, and we mean to attend to this side of the business. Cattle, hens, and hogs will pay well. * * * * * Any one striking Lacombe from you could hardly do better than come to 'The Glen' in the first place. We made some slight mistakes in the way of buying, &c., and I would be glad to give the benefit of my experience to a 'brither Scot.' If advised of their coming I could also meet them at station and do what was possible for them. I will within the next few weeks write friends about the country, and should they think of coming you will hear from either themselves or me.

"With kind regards,

"Very faithfully yours,

"A. URQUHART."

VII.—VISIT OF MR. FRASER OF THE TORONTO MAIL AND EMPIRE.

Mr. Alex. Fraser, the city editor of the Toronto *Mail* and *Empire*, who is well known in the North of Scotland as an enthusiastic Highlander, and a scholarly writer on Celtic matters, paid a visit to his native land in July and August. Mr. Fraser put himself in communication with me and I arranged that he should address meetings almost every evening during his stay in the north. Mr. Fraser is a singularly forcible and convincing speaker, and coming fresh from the other side his addresses created a most favourable impression, and the *Moray and Nairn Express*, the *Inverness Chronicle* the *Inverness Courier*, the *Highlander*, &c., devoted columns of their space to his speeches, and, apart from the good his visit did in stimulating an interest in Canada, it led to immediate practical results in one or two instances.

VIII.—MEETINGS IN THE SOUTH OF SCOTLAND.

On the invitation of Mr. Mackay, the energetic shipping agent in Sterling, and with your own and Mr. Fleming's consent, I addressed a number of meetings in the south of Scotland in the spring. The meetings were arranged, advertised, and halls provided at the expense of the local committees, and they were all very successful. I received, some months later, a communication from Mr. Mackay inclosing a copy of a letter received from the Allans congratulating him on the fact that his bookings to Canada showed an increase on former years, notwithstanding the general depression in emigration to that country. Mr. Mackay generously attributed his success to the assistance I was able to render him.

At the Dumfries show Mr. Fleming and I discussed the best methods of working, and, with the wiew of stimulating emigration we agreed to work occasionally in each other's districts. Accordingly, during the last and present month I have addressed large meetings in Selkirkshire, Peebles, Roxburgh, Wigton, Dumfries and Ayrshire. As Mr. Fleming is an old and experienced emigration hand I anticipate that when he visits the north his methods of carrying on the campaign will produce good results.

IX. PAMPHLETS SUPPLIED IN NEW MARKET, INVERNESS.

Although Inverness is nominally my headquarters, I am travelling continually, and to obviate any delay in supplying information, I have with your approval made arrangements with Mr. Young, bookseller, to furnish pamphlets to inquirers in my absence. The advertisement to this effect appears in his circular which is published once a month, and has a very large free circulation. As the advertisement for the year only

costs 5s., and as Mr. Young distributes the pamphlets to the best advantage and gratuitously, the arrangement is useful and economical. The new market is much frequented by farmers and country people, Mr. Young's shop being the rendezvous for them all.

X.—CORRESPONDENCE.

I receive a large number of letters asking for pamphlets, information, and advice about every conceivable subject connected with the Dominion.

I have also a considerable correspondence with school boards applying for the use of schools; with teachers, fixing dates, and arranging meetings, and with clergymen and people of influence in getting them interested in Canada, and in the success of the meetings held in their districts.

XI.—RESULTS.

I have sent from time to time during the year the names of those who had gone to Canada with the intention of settling. From information received in May last from the various shipping agents in the north I ascertained that their bookings stood about their usual average, while Grant & Co., of Inverness improved on former years. In a letter just received from the firm mentioned, and which I inclose, they report that for the summer months their booking shows better results than it did last year. I should also like to emphasize the fact pointed out in Grant & Co.'s letter, that many sail to New York whose ultimate destination is Canada.

In respect to capital, physique and experience in farm work, the emigrants who left the Highlands during the last ten months will compare very favourably with any that have sailed within recent years, while there has been also a welcome sprinkling of experienced domestic servants.

XII.—FUTURE ANTICIPATIONS.

Taking into consideration the number of inquiries I have received during the last few months by people who evidently mean business, and the fact that prices for farm produce are gradually hardening, and things improving all round, the future prospect is very hopeful, and I anticipate there will be quite a boom in emigration during the coming spring.

XIII.—CONCLUSION.

I have again to express my thanks to the teachers of schools for their valuable assistance and hearty co-operation; also to the northern press for the great service they are rendering in giving publicity to reports of lectures, &c. I continue to be indebted to the Highland Railway Co., for travelling privileges, and to yourself and all in your office for unfailing courtesy and cordial support.

I have the honour to be, sir,

Your obedient servant,

W. G. STUART,

Agent for the Canadian Government.

Department of the Interior.

Letter appended to Mr W. G. Stuart's Report.

INVERNESS, 21st October, 1895.

W. G. STUART, Esq.,
Canadian Government Agent.

DEAR SIR,—You will no doubt be glad to know what has been doing in the way of emigration to Canada this year. Well, the season is not yet over, but we are pleased to be able to say that for the summer months our booking shows better results than it did last year. We have also booked some passengers to New York, but those ultimate destination was Canada, they finding that they could go this way for almost the same money, and it has given them a look at the United States, as some of them have expressed it. Our passengers have been of a good class and favourable reports have come from those who went out lately. So long as the government has an energetic agent (like yourself) in our district, we are convinced that Canada will get the bulk of the emigration from our quarter.

Yours truly,

GRANT & CO.

No. 9.

REPORT OF MR. A. BODARD, AGENT IN FRANCE AND BELGIUM.

PARIS, 15th October, 1895.

To the Hon. Sir CHARLES TUPPER, Bart.,
High Commissioner for Canada, London.

SIR,—I have the honour to submit to you the following report of my work in France and Belgium from the beginning of the year 1895 to date.

I distributed in 1895 a large number of pamphlets and circulars on Canada, and many farmers wrote to me asking for more information.

I offered also, and mailed gratuitously to about 150 French newspapers, circulating among the farmers, two copies of the little book published in French by the Canadian Pacific Railway, "Across the N. W. of Canada." In return the editors inserted a small advertisement in favour of Canada and of the book, and the supply furnished to me (1,000 copies) was rapidly exhausted.

I was not able in 1895 to go and see all those wishing to speak to me, the number being too great. I went and talked only with the families who seemed to be the most serious and ready to leave. The best settlers come principally from the west, north and east of France, and those who left for Canada in 1895 came from these parts. I do no work and publish no advertisements in the towns and cities, because Canada does not want mechanics; all my attention is given to farmers, consequently very few people induced by me to go out to Canada remain in the cities, but settle generally in Manitoba and the North-west Territories.

The French farmers form a good class of settlers, but it takes time to induce them to leave. They rent farms for a long period of time, and they cannot leave until the lease is ended. Rural properties in France can be sold only at a loss. It is sometimes very difficult to find buyers, the low prices of farm products having caused a general crisis. For these reasons the people cannot leave in large numbers, but it is a great thing that all those already settled in Canada are satisfied with the country.

I think the number of good emigrants would increase certainly if there was in Canada some society to lend them $200 or $300 to settle on their land. The French and Belgian farmers who leave for Canada are worth generally from $400 to $600, but the costs of the voyage take two-thirds of this when there is a large family to be transported, and they have not enough left to start on. Many good families are also too poor even to pay for their passage. They earn only from 25 to 40 cents a day. For them Canada would be a paradise.

The cattle and horses imported to France from Canada, via St. Malo, found ready buyers, and the horses were admired. That trade will increase when the direct steamship line is in operation. The low prices of cheese in Canada induced me to advise some French farmers to start in Canada cheese factories of gruyère and ship their products to France and Belgium, where that cheese is retailed at from 20 to 24 cents a pound. I think they will follow my advice in 1896.

My correspondence is comparatively larger than last year; the number of letters received in nine months is 1,600, and from October to April next I expect many.

Allow me to thank you for the hearty support you, Mr. Colmer and Mr. Reynolds, gave me in the present year, and believe me, sir, your obedient servant,

A. BODARD.

OPERATIONS IN THE UNITED STATES.

No. 1.

REPORT OF MR. A. F. HOLMES (CHIEF AGENT).

To A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—According to instructions received from the department, I joined the Canadian Pacific exhibition car at Oswego, N.Y., on the 4th January, 1895, and stayed with the car over lines of Rome, Watertown and Ogensburg, Vermont Central, and Adirondack R. R. to Moira Junction, giving information regarding the Canadian North-west, and making arrangements for an excursion to leave Prescott by the Canadian Pacific Railway on the 10th April.

Judging from the interest taken and the number of those who requested information up to the time I left the car, which was the 24th February, I fully anticipated at least seventy or eighty people would go with us in the spring.

These anticipations, however, were not realized, as unfortunately the excursion was postponed, presumably on account of the severe weather, until some indefinite time in the summer.

On the 24th February I received instructions to go to Michigan and arrange for a party to leave Saginaw and vicinity to join the New York party at North Bay on the 11th April, and Mr. P. F. Daly, who had been laid off from the preceding October, was ordered to take my place with the exhibition car, leaving Mr. Munson to go ahead and bill the car, and arrange for halls for the lectures.

The car was kept running in Vermont until the latter end of March, when the work was stopped, and Mr. Munson laid off. Mr. Daly was then sent to Morristown to attend to correspondence regarding excursions, and I received orders, after getting the Michigan party off, to return to Morristown, relieve Mr. Daly and wind up the work there, and was notified that all agents, with the exception of Mr. Swanson, who was employed in the New England States, would be laid off until further orders.

I started some fifteen settlers from Michigan about the 10th April, and gave certificates to about twenty more, to follow as soon as they could get ready, and returned to Morristown about the 4th of May. I closed this office on the 31st May, and directed all correspondence to be forwarded to the department at Ottawa.

I went to Ottawa and reported on the work done so far and received instructions to be ready for work again on the 1st September.

I went to Ottawa accordingly, and there, owing to communications received by the department, it was decided that I should go to Chicago and look into the proposed Chicago Western Society with a view to having a small exhibit of North-west products and opening an office.

I found on arrival at Chicago and looking over the situation that it was the intention to have a joint exhibition of the products of the Western States and Canadian North-west to offset the emigration movements of the Southern States and railroads, and funds were to be supplied by the interested States and railroads for that purpose.

Owing mainly to the fact that the money was not forthcoming for a joint exhibition, the States made arrangements for separate exhibits, and under the circumstances I advised that we also should have a separate exhibit, and judging from the inquiries we

have had, and those made at the other western land offices, we should get a number of first class settlers in the spring from this.

On the 31st October I received instructions to get the exhibit arranged in good shape and leave Mr. P. F. Daly in charge for five months from the 1st November, which work I am now attending to, having placed our exhibit in Suite 528, Chicago Stock Exchange Building Co., Washington and La Salle Sts., Chicago.

Judging from the returns of homestead entries made during the year 1895 the work in the United States shows up well as compared with other countries. This is specially the case as regards those neighbourhoods in the States where systematic work has been done in this and previous years, as in Idaho, Washington, Minnesota, Dakota, Michigan, Oregon and Kansas.

The failure to get a good party from New York State is mainly the result in my opinion of changing the date of the proposed excursion and thus creating uncertainty about the matter amongst the people, and not because there were no people who wanted to leave. As a matter of fact the books on the car showed at least two people, heads of families, in each place where we stopped who wanted to move, and who had the means to go.

In order to get the best results in the United States the department should, in my opinion, have at least five regular agents paid by salary, who should have charge of the state work and appoint local agents on commission. This scheme would not cost more than twelve to fifteen thousand dollars, and would be the means, I feel sure, of giving us close to a thousand homestead entries a year, and a good class of settlers accustomed to western life, and with means sufficient to make a good start in our country.

I have the honour to be, sir,

Your obedient servant,

ALFRED F. HOLMES.

No. 2.

REPORT OF MR. C. O. SWANSON.

(Special Scandinavian Agent in the United States.)

Wetaskiwin, Alberta, 29th October ,1895.

A. M. Burgess, Esq.,
Deputy of the Minister of the Interior,
Ottawa.

Sir,—I beg to send you my report of immigration work done by me during the last ten months. I have had from the different States 239 souls :

From	Massachusetts	21
"	Vermont	11
"	NewHampshire	9
"	New York	18
"	Connecticut	6
"	Michigan	12
"	Maine	2
"	New Jersey	13
"	Illinois	7
"	Wisconsin	3
"	Minnesota	28
"	Kansas	18
"	Nebraska	16
"	North Dakota	30
"	South Dakota	4
"	Iowa	17
"	Washington	11
"	California	5
"	Montana	8
"	Oregon	1

From Sweden I have had 78 ; of these are 47 servant girls, for whom I have sent prepaid tickets. Most of them are employed in the province of Quebec and are of a superior class. They are well liked, and the demand for such is larger than I can supply. On the whole the immigrants have brought in more means than in former years, and, with one or two exceptions, they are well satisfied.

I have made three trips to Alberta. The first, on the 10th of April ; the second, August 21, and the third, October 16. On my way home on the August trip I visited the Dakotas, Minnesota, Wisconsin and Michigan. I don't see why we should not get a large Scandinavian immigration from the United States ; but, of course, there are drawbacks, as there is a very small percentage of the people wanting to go that can do so, on account of being poor and having their properties mortgaged, and we cannot invite people without means to immigrate ; but, of course, in time, as our settlements grow older and more prosperous, and are able to help the poorer class of immigrants, then we can also encourage that class of people to immigrate.

I have the honour to be, sir,
Your obedient servant,
C. O. SWANSON.

No. 3.

REPORT OF COLONIZATION WORK PERFORMED BY THE REV. FATHER MORIN.

(TRANSLATION.)

BEAUMONT, ALBERTA, N.W.T., 1st November, 1895.

To A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit to you my fifth annual report on my work of colonization and repatriation for the year ending the 1st November, 1895.

DECLINE OF IMMIGRATION.

The current of immigration to the North-west has slackened a little, and we can notice in the number of those repatriated an appreciable diminution compared with the two preceding years. For this we can give the following causes :—

1st. Bad harvests and depressions in property in the western United States, and, in consequence, a difficulty for our friends in selling their farms and realizing the necessary capital to enable them to come to our colony and establish themselves there with a chance of success.

2nd. The active work of the American agents to hinder the emigration, depreciate the soil, the climate and resources of Alberta, and thus retain our compatriots.

3rd. The unhappy school question, always pending and never settled, is another thing which affects this decline ; it may even be considered as the greatest obstacle to the repatriation of our countrymen.

FAMILIES FROM KANSAS AND MINNESOTA.

The journey which I made last winter to the United States has not been unsuccessful. I had the pleasure, in the course of the spring and summer, of seeing the arrival of fifteen families from Kansas and twelve families from Minnesota, forming a population of one hundred and forty-four souls. Thirty families more came from the United States and Eastern Canada. The approximate numbers of French Canadians who have come to the colony, during the course of this year, may be stated as two hundred and twenty-five souls.

METHODS OF WORK.

During the course of this journey I gave eighteen lectures ; I visited my compatriots at their dwellings ; I demonstrated the resources of the country ; I distributed hundreds of pamphlets, and I believe that I have done my utmost to destroy the prejudicial reports which had been purposely spread in regard to our land for settlement.

MORE PEOPLE COMING.

I have reason to hope that the families which have followed me are only the advance guard of others who will shortly come to us.

I can assure you that of the four hundred French Canadian families which live in the counties of Cloud and Washington, in the State of Kansas, more than half will come to us as soon as they have had a sufficiently abundant harvest to provide them with the cost of their transport and the first expenses of setting up for themselves in this country. These families, as a rule, have a good stock of cattle, wagons and agricultural implements.

DELEGATES TO SPY OUT THE LAND.

Several delegates came to visit our district to obtain information as to the place. They traversed the country in every sense, interrogated the colonists who have been settled there for some years, and returned carrying with them a good impression of their journey.

FAVOURS FROM THE C. P. R.

The Canadian Pacific Railway Company has shown kindness to me and my friends, which I am glad to acknowledge. Free tickets for delegates, tickets in favour of numerous families, reduced tickets for needy colonists, advances of money, &c., &c. Nothing has been neglected in assisting my work. I have always been fortunate in my requests for favours and for this I cordially thank the officers of the powerful company.

PROGRESS IN THE COLONIES.

Our French Canadian colonies continue to prosper, slowly but surely. Roads are opened, bridges constructed over the rivers, churches raised, school districts formed, post offices established, &c., &c. Everything moves, all advances, everything is organizing itself. The future of our colonies is safe, it reposes on solid foundations.

NEW SETTLEMENT.

A new settlement has been established about eleven miles to the south of Edmonton, along the line of railway, in townships 50 and 51, ranges 23 and 24, west of the 5th Meridian. It already comprises fifty families. forming a population of one hundred and ninety-eight souls. These families came, for the most part, from Dakota and Minnesota. New recruits come to us every week and before long this settlement will be one of the most prosperous of the district.

The post office, opened in the month of August last, bears the name of Beaumont (Alberta, N.W.T.)

TELEPHONE COMMUNICATION.

The Department of Public Works kindly put at our disposal part of the iron wire belonging to the old telegraph line from Edmonton to Battleford; this will allow us to set up a telephone line between Morinville and St. Albert, and thus to connect my first colony with the chief place of the district. The colonists are to cut and carry the posts to their places in the course of the winter. The distance between the two places is eleven miles.

IMPROVING AND EXTENDING THE ROADS.

With the increasing population which comes to us it is necessary to think of improvements. This year by means of a "grading machine" we have been able to put the road between St. Albert and Edmonton in good condition. We propose to continue this work next spring as soon as the colonists are freed from their field work.

There is also the question of opening new routes to put in communication with the terminus of the railway and the town the old Hudson's Bay Company's posts: Lake St. Anne, Lake la Biche, the Landing and Victoria. These posts, formerly purely for trading, are gradually becoming tolerably important centres of colonization. The assistance of the government will be asked in carrying out this work.

The grant which is most imperatively asked and the most impatiently awaited is that which will enable us to connect by a bridge for traffic the two shores of the Saskatchewan, at Edmonton. Everyone agrees in recognizing the absolute necessity for this improvement.

VALUABLE TIMBER LIMITS.

It would be desirable that your department should study the very important question of timber limits in the district of Edmonton. I said a few words on this subject in my last report, and I believe it necessary that I should return to the subject this year. For us it is a vital question; I therefore beg of you to give it your most earnest attention.

These timber limits are of a remarkable wealth and could be a source of considerable revenue to the country; we have all an interest in protecting them. Wood for sawing is scarce and sells at a good price. Our colonists, when building, are obliged to go to town for it, a distance of about fifteen, twenty and twenty-five miles.

Thus, weask for the colonist permission to cut in the limits all the dead wood, dry, fallen and the spoiling. (There are sufficient quantities of it to build a town.)

The Egg lake limits in townships 50, ranges 24 and 25, cover a dozen sections, the ground is strewn with tree trunks of which some would cut up into lengths of from forty to fifty feet.

I repeat it, a spark carelessly thrown into these leaves, this brush, these trunks of dry trees, and all would be over with the entire limit; in one day it would be destroyed and razed; there are the materials for an immense fire.

For the colonists of the district it would be an irreparable misfortune, a real catastrophe.

In permitting the colonists to take wood which they needed for finishing their outbuildings or repairing them, it would allow of our cleaning the forest, preserving it from destruction and keeping for the district its special attraction—its forest wealth.

Your department would have to appoint a guardian of the forest, among whose duties would be the watching these limits and showing to each applicant for wood the quantity which he might take. This office would act under the directions of the land agent or the homestead inspector.

DISTINGUISHED VISITORS.

We have had the honour this year of receiving visits from high and distinguished personages. We may mention: Lord and Lady Aberdeen, Sir Mackenzie Bowell, the Hon. Minister of the Interior, and His Honour the Lieutenant Governor of the province of Quebec. We hope that these gentlemen have taken away a good impression of their trip, and being better acquainted with our beautiful country, they will be in a good position to procure for us the means of developing its resources.

SATISFACTORY VITAL STATISTICS.

We have not had to register a single death entry among the adults, and only five or six children's burials, which gives an evident proof of the salubrity of the climate. On the other hand a perfect swarm of little boys has arrived among us, the making of future tillers of the soil.

A GOOD HARVEST.

The harvest this year has been abundant, although in some places a little decreased by a frost which occurred on the night of the 25th August. But happily three-fourths of the crop had been by this time gathered in. The seed sown in April and in the first part of May ripened perfectly, and only the later sowings were damaged. But even the damaged grain was not quite lost, as the colonists were able to use it for fattening stock. The yield such as it was still gives an average of 25 bushels per acre for barley and oats, which is very satisfactory. The vegetables ripened and gave a good yield.

AN EXHIBIT AT MONTREAL.

I sent samples of grains, of hay and of vegetables to the last provincial exhibition in Montreal. I may say that these products showed with advantage beside the products of the same kind cultivated in the province of Quebec.

Mr. L. O. Armstrong, agent for the C.P.R., was of great assistance to me in this connection, and I will make it a duty to offer him my sincere thanks.

MIXED FARMING THE THING FOR ALBERTA.

I am more and more certain that the district of Edmonton lends itself admirably to mixed farming, *i. e.* to the raising of stock, horses, cattle and sheep, and to gain production restricted to the local demand. The want of a market, the enormous expense of transport, should prevent our relying upon large grain crops, though the soil would favour their production admirably ; cultivation on a large scale will do better later, when we have more favourable markets.

STOCK RAISING PAYS.

Stock has always a good market price. On account of the abundant pasture and the low cost of feeding, the colonist can always hope for a remunerative profit. The wholesale dealers in stock come to us to buy, and thus the colonist does not lose time and is not at the cost of transport. The colony as yet has not enough stock to meet the demand.

POPULATION OF COLONY.

The entire population of the colony exceeds two thousand two hundred souls. It is difficult to give an exact number ; it would take considerable time to traverse the colony and number the families ; some arrive every week, and I am often away from the colony for a long time.

SASKATCHEWAN GOLD.

Gold dust is still obtained from the river Saskatchewan. Explorations have been made in the bed of the other rivers of the West : Arthabaska, La Paix (Peace), McLeod, Pembina ; everywhere the precious metal has been found but in small quantities. It is still the Saskatchewan which remunerates the miners best. Two men sold in my presence to the Jacques Cartier bank the result of sixty days of work for $180, this gives an average of $45 per month each. I consider these results very satisfactory. A machine which is very ingenious has been invented this summer to work for the discovery of gold ; it will be tried this autumn when the water is low. We have reason to believe that it will be successful.

MANY SETTLERS BUY RAILWAY LANDS.

The Canadian Pacific Railway Company sells its lands at a price of from three to three dollars and a half per acre. A good number of the colonists prefer to buy at this price a farm in the centre of the colony, near the markets, the mills, the church, the school, &c., &c., rather than go off to a distance of ten miles, and take up the homesteads of the Government.

THE HALF-BREEDS DESERTING THEIR LANDS.

Our poor half-breeds continue to desert our colonies and to take the direction of the north. This poor child of the prairie cannot submit to the exigencies of civilization; our customs and our laws are burdensome to him, and he frees himself by abandoning his native country for the depths of the solitude of Athabaska and the Mackenzie.

For a few hundred dollars a colonist could buy from these dissatisfied half-breeds, tired of farming, a fine farm of from three to four hundred acres, with house, barn, stable, sheds, fencing and other improvements, and thus equipped he might make himself very comfortable and secure a harvest the first year.

LOCATIONS OF FRENCH CANADIAN SETTLEMENTS.

Groups of French Canadian settlers are now established at St. Albert, Morinville, Fort Saskatchewan, Stony Plain, Beaumont, St. Pierre, Vegreville and Edmonton.

The whole humbly submitted,

J. BTE. MORIN, *Priest.*

No. 4.

REPORT OF THE OPERATIONS OF THE REV. FATHER CORBEIL.

(TRANSLATION.)

ST. BONIFACE, MANITOBA, 15th October, 1895.

To A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to make a report to you of my work during the three months that I have occupied myself with colonization in Manitoba.

I have devoted one month to visiting different parishes of Manitoba, among others Ste. Rose du Lac, to the east of lake Dauphin, where there are still a large number of free lots (homesteads) to take up. The soil at the latter place is excellent; wheat brings 40 bushels to the acre, and I saw a field of oats which this year yielded 80 bushels to the acre. There is hay in great abundance and sufficient water during the whole year, and enough wood to answer the needs of the colonists, such as the building of houses and for heating.

The conditions are thus very advantageous for colonists, and if they were well known I do not doubt that a strong current of French Canadian colonization would set in from the United States.

Returning to Montreal in the first days of the month of August, and there visiting some parishes, I succeeded in diverting from the United States two families, who will be ready to leave for Manitoba next spring. Since then four other families are preparing to come and settle in our province, where they hope to find more comfort in their lives and to establish their children.

At the beginning of September I went to visit some towns of the Eastern States—Lowell, Nashua and Manchester. In these manufacturing towns the French Canadians quickly lose (this is a personal observation) the skill of cultivating the land. They seem to lose, with their health, in manufacturing, that moral courage which made their fathers triumph over the thousand and one difficulties which met for so long a time the colonists of the New France. Nevertheless, I met some among them who would be inclined to come to Manitoba, and whom I hope to be able to influence during another trip.

I have the honour to be, sir,
Your humble servant,
O. CORBEIL, *Priest.*

TRANSLATION OF REPORT OF THE GENERAL AGENT OF *LA SOCIETÉ GÉNÉRALE DE COLONISATION ET DE RAPATRIEMENT.*

MONTREAL, 2nd December, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior, Ottawa.

SIR,—The report which I have the honour to transmit to you to-day on the operations of the "General Society of Colonization and Repatriation of the Province of Quebec," to which I am attached in the capacity of immigration agent, is substantially the same as that of last year. There is constant progress in every respect, and the number of the colonists registered at our offices has increased in a considerable proportion.

Below are the particulars for the eleven months of the year 1895 :—

January	38
February	58
March	70
April	138
May	151
June	114
July	203
August	340
September	390
October	216
November	132
Total	1,850

SETTLERS' EXCURSIONS.

More than a dozen special excursions, at lower rates than those obtained by the society for single visitors, have taken place during the past season to the regions suitable for colonization at lake St. John and to the north-west of Montreal, and it may be said, without exaggeration, that a number at least equal to that of the persons registered in the books of the society visited the lands open to colonization by means of these excursions. These statistics show that the interest of the public is even greater than it has been in the enterprise of settling these vacant lands, and that more favourable circumstances for the development of the society's work have never occurred.

GROWTH OF SETTLEMENT.

Another fact, which should sustain the courage of the friends of colonization, is that from day to day the number of those who settle permanently on the lands which they have prospected becomes larger. This number comprises almost two-thirds of the total number of those who have joined our excursions.

To avoid any cause for misunderstanding it is well to note that women and children are included in the calculations mentioned in this report.

THE SOCIETY MEETING A FELT NEED.

If the usefulness and need of an institution are to be judged by the results produced by it, it may now, reasonably I think, be stated that both have been proved by the Repatriation Society, for the success it has attained has been very considerable.

EMIGRATION DECREASING.

Confronted by the results of the society's work, the public might perhaps be inclined to ask *if emigration diminishes.* No question is more interesting to study, for it concerns the preservation or the loss of the vital forces of the nation, and that which influences its future most closely.

I shall answer yes and no to this much disputed question.

On the whole, emigration, the exodus from the country to the United States, and also the influx of the rural population to the cities, has decreased perceptibly, and the return movement, scarcely noticeable for some time, has increased very appreciably. When the crisis came in the United States three years ago, a larger number than one would believe of our emigrated compatriots returned to Canada. The governments were not prepared to receive, above all to retain this unexpected gift. In spite of some attempts to retain them, a large number of those who had come back to us returned, or are now returning, to foreign parts; it may be alone, it may be in small groups as the opportunity occurs for them to take advantage of the re-opening of American manufactories; but although the number of those who thus emigrate is still considerable—too considerable even—it would not be true to state that the emigration movement is accentuated. The greater part of those who are leaving now are those who had already been away, and it is feared that no efforts that can be made on this side of the line can wholly prevent this. Several of the Canadian clergy in New England have given us their observations on this subject. The Canadian, they say, who once tastes a manufacturing life, has entangled himself in a fatal snare, a veritable gangrene which is destined to destroy him.

WHAT DRAWS OUR PEOPLE TO THE STATES.

Struck by the advantages, more apparent than real, of working in a large community, with his wife and children about him, with regular pay, and the attractions of a bustling life, our compatriot soon loses the taste and aptitude for the healthy occupations of the soil, and if circumstances force him back to the farm he stays there, as a rule, but a short time.

And what results from all this finally? Nine times out of ten he grows old in poverty, wastes his strength, and dies without having assured the future of his family.

A MISTAKE TO DESERT THE FARM FOR THE FACTORY.

The best days of the factories are gone, at least for the workingman. The lowering of wages consequent upon the general introduction of machines and the employment of women and children, can only aggravate his position and compromise his future. With the result that—one could not repeat it too often—those who to-day abandon the strengthening and remunerative work of the fields and betake themselves to the enervating slavery of the factories commit an enormous mistake, which must affect prejudiciously all their future lives.

I hope, sir, that you will pardon me the length of this digression, but it appeared to me an imperative duty to denounce in a partly official manner this great evil which ravages our population.

ANOTHER SIDE OF THE PICTURE.

Another, and pleasanter side of the picture, is the real and tangible return movement to the country for the cultivation of the lands.

This remark is not based only on the work done by the office of the Repatriation Society, though it operates in the midst of the most important centre of population of the country and finds itself in a most favourable position for the collection of precise information. I consider that I possess a still more certain source of information in the

statements furnished by the Canadian Pacific Railway Company, which everyone is at liberty to consult. For, according to the testimony of Mr. McNicoll, the general passenger agent of the company, there is progress in the right direction and there exist signs which infallibly indicate a more marked improvement to come. As the operations of the company cover an immense stretch of territory, they should furnish a correct general view in this respect.

I would mention also the statements given to the provincial authorities by the Crown lands agents, who all speak of a noteworthy growth of settlement—witness also the increased returns of receipts by the railways, so-called colonization roads, as the Montreal and Western and that of Temiscaming. These two lines, it may be mentioned in passing, should at any price be pushed forward into the splendid regions for colonization which they would cross. Between Labelle and Baie des Pères there is a region so rich in varied resources that it would be very easy to renew explorations there and to establish townships such as those of the east. Thousands of colonists could live there in comfort.

GOING ABROAD FOR TEMPORARY EMPLOYMENT.

Finally, there is no occasion to be too much alarmed at the loss of population in certain places where the harvest has failed, or where work is not at present to be had. Canada is peopled by courageous and intrepid workmen who do not fear to go far to ask for work if it is not to be had at home. Thus, every autumn 30,000 Canadians, at the lowest estimate, go to our shanties and as far as those of the forests of Maine and Michigan to obtain work. In the spring they also leave by thousands for the brick fields of Massachusetts and other states of the east. This does not mean that they really emigrate.

PREVENTION BETTER THAN CURE.

In concluding this report I affirm again that there would be but little wisdom or patriotism in abandoning the work of repatriation at the very time when it is beginning to produce some results.

But there is a better method than that: it is to combat without ceasing emigration to the United States, by means of colonization, and making known to those of our nationality the substantial advantages offered by the vacant lands in this country, and by furnishing them with means of going there and supporting themselves. Such is an important part of the work undertaken by the "Société Générale de Colonisation, &c.," work towards the extension of which it devotes all the labour, all the activity of which it is capable. Prevention is better than cure, says an aphorism. One could add that the time to save the water for the mill is before it has passed the dam. The first thing to do is to keep our people in the country, and afterwards to gather the exiles who are always dear to us.

It would be easy for me, beyond the means used by the society already, to make a number of suggestions towards this end, which would be thoroughly practical. But the fund put at our disposal being limited, this would be superfluous. All that I can state is, in conclusion, that the society is ready at all times to do an amount of work proportionate to the means which are granted to it.

I have the honour to subscribe myself, sir,

Your very obedient servant,

DR. T. A. BRISSON,

General Agent of the Society.

No. 6.

REPORT OF THE REV. FATHER PARADIS.

OTTAWA, 13th December, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to report that in the first week in December, 1894, after an interview I had with the Hon. Mr. Daly, I proceeded to the State of Michigan, first visiting the counties of Marquette and Houghton, in which I made a perliminary canvass, with a view of finding out how many families were anxious to return to Canada. I was invited by the Rev. Father Letellier, the parish priest of Lake Linden, to visit his parish, at the urgent request of the people themselves. I found the people in a state of great misery and hardship; they had had no work for the past two years, and were therefore craving for some employment, but could find none in their locality. I gave four or five lectures on the advantages people like themselves, accustomed to hard work would gain by settling in the Nipissing district of Ontario. I spoke of the beauty of the land, the chances of getting work, the close proximity to markets, the railway facilities, and the warm welcome and encouragement they would receive in Canada. I gave them an account of those of their fellow-countrymen who had already settled in the Nipissing district, the way they had succeeded, and was able to tell that none of them would consent on any account to return to Michigan. On the occasion of this visit to Michigan over five hundred heads of families gave me their names as being desirous of returning to Canada. Out of these I made a selection of about one hundred and fifty heads of families whom I brought to my new colony, and with the exception of a few, about ten to twenty, who went back because they were unsettled people, who would not remain anywhere, these have remained, and to-day are in a flourishing condition. They came in April. They did so, however, somewhat against my will, because in this part of the country, where the land is of clay bottom, the water is kept late in the spring, and their too early arrival resulted in some difficulties and hardships, which had the effect of turning back some of the people. The movement was retarded somewhat by an opposition organized in the locality they were leaving. A party was organized at the same time as mine, the persons composing it being provided with return tickets. They came to Verner along with my colonists, and after spending a few days there they returned to the States, and reported themselves as being disgusted settlers, while in truth they were not settlers at all, but merely excursionists, who had no intention of remaining permanently in the country, their evident object being to prevent the movement of those who had at my suggestion made up their minds to return to Canada They made all kinds of false representations with regard to the country, and endeavoured by all means in their power to counteract the effect of my endeavours in repatriating our fellow-countrymen; but I may say that they failed in their efforts, as those who have remained in the colony near Verner, to the number of about one hundred heads of families, are ample proof that the country is all that I have represented it to be, as they are contented and find there everything they want.

Facts are stubborn things, and I will now make a comparison between those who settled in my colony, and those who did not. Those who did are to-day very well satisfied and prosperous. The poorest of them has cleared at least five acres of land and they all can find work the whole year round. On the other hand, many of those who despised Verner and tried to induce others not to go there, have been spending more money than it would have cost them to settle in the colony, in travelling from the west to the east of the United States in quest of work without finding it.

I am in receipt daily of letters from parties asking whether there is room yet for them. They say that they have all decided to come and join their former neighbours in the spring, realizing that it is a mistake for them to further remain in the United States, where they have never been able to make anything solid, in the line of a profitable living.

Of the one hundred families now located in the colony near Verner, there is not one of them who would sell the results of his work for $400 or $500, and I think that in so short a time they could never have realized such an amount in the United States, with the same means at their disposal.

The colony has had twenty miles of new road surveyed, and cut through, in the townships of Coldwell, Kirkpatrick, Hugel and Crearar.

The government of Ontario has helped in building some parts of that road, and it is hoped that they will still increase the grant so that these public works of so much material importance to my new settlement may be pushed forward.

I must thank the Department of the Interior for the liberal help they gave to my colony.

Since the month of April I have succeeded in erecting a saw-mill for the local wants of the settlers, with a capacity of ten thousand feet of lumber a day, and also a rolling-mill that gives thirty-five barrels of flour a day.

The new settlement near Verner has been named Domremy. The Canadian Pacific Railway authorities are sending this week an engineer to examine the location of the site for a station, and I have no doubt that this place will yet be one of importance in northern Ontario.

Domremy is situated about two miles west from the station of Verner, on the main line of the Canadian Pacific Railway. The importance of the place is easily understood when we consider that there is a wagon road under construction which will connect the two biggest lakes in the vicinity, that is to say lake Nipissing and lake Timagaming. This region is the centre of a most beautiful wheat growing portion of the country. It is the centre of an area of about sixty miles square, the land in which is a rich clay loam, slightly undulating, and the very best adapted for the cultivation of wheat. The settlers have not as yet grown much of this cereal, as there was last spring no flour mill available, but the new mill meets this want and will prove an immense boon to the settlement. This part of the country has heretofore imported annually many thousands of dollars worth of flour, and we now anticipate growing and grinding wheat to meet at least part of this demand, and eventually we hope the whole of it.

I desire to thank in a special manner the authorities of the Canadian Pacific Railway Company for the liberal manner in which they have dealt with the settlers under my charge, and for the advantages and facilities afforded in bringing them into the country, and I feel sure that these things are no less appreciated by the settlers themselves than by me.

I must also thank the Honourable Mr. Daly, Sir Mackenzie Bowell, and yourself for the many encouragements I have met with at your hands.

I have the honour to be, sir,

Your obedient servant,

C. A. M. PARADIS.

REPORTS OF CANADIAN AGENTS.

No. 1.

REPORT OF THE IMMIGRATION AGENT AT ST. JOHN, N.B.

(MR. S. GARDNER.)

ST. JOHN, N.B., October 31, 1895.

To A. M. BURGESS, Esq.,
Deputy Minister of Interior,
Ottawa, Ontario.

SIR,—I have the honour to submit a report showing the operations of this agency during ten months of 1895.

EMIGRANT ARRIVALS.

The number reported at this agency via St. Lawrence, Halifax, Quebec and the United States, and not otherwise reported, are 111 English, 26 Scotch, one Scandinavian; total 138 emigrants. Of these 8 were farmers, 33 farm labourers, 5 general labourers, 4 mechanics, 42 female domestics, 48 miscellaneous; 12 went to the United States, 126 settled in New Brunswick.

DISPOSAL OF THE EMIGRANTS.

The farmers bought farms and settled on them; the farm labourers were at once forwarded to the different counties and to those who had applied at this agency for them, also the female domestics and the miscellaneous. The demand for all classes of workers on the soil, and especially domestic servants, still exceeds the supply.

SATISFIED SETTLERS.

All who bought farms and settled on them are very well satisfied and write in glowing terms of their purchases. They were induced to come to New Brunswick from the description of farms for sale sent to the High Commissioner's office, London, giving prices, &c. The farm labourers are all well pleased with their change, and are saving to send for their relations.

PLENTY OF INQUIRERS.

As usual I am receiving applications from Europe and the United States for particulars of the country as to soil, climate, &c., and these receive my prompt and careful attention.

FORMER NEW BRUNSWICKERS RETURNING HOME.

I am pleased to report the return during the 10 months of 1895 of many former New Brunswickers to their old homes in this province; some buying farms, others taking up land under the Labour Act, being fully satisfied that New Brunswick is the better place, after testing to the full the United States, to which they were allured.

VALUE OF IMMIGRANTS' EFFECTS.

The immigrants passing through this agency brought in cash $6,206, and effects, $1,980.

The Customs records at the port of St. John give, all told, 180 entries, and 750 persons with effects valued at $25,306, for ten months.

STATISTICS OF TRAVEL.

The travel by the International Line Steamships between Boston and St. John, N.B., shows for ten months: Ins, 17,487; outs, 6,888.

REPORTS FROM THE COUNTIES.

During ten months of 1895 there settled in—

Albert	County	42
Queen's	do	65
Charlotte	do	153
Westmoreland	do	458
York	do	238
Madawaska	do	29
Northumberland	do	179
Restigouche	do	63
Gloucester	do	132
Kent	do	85
King's	do	35
Carleton	do	105
Victoria	do	84
Total number of persons		1,668

ALBERT COUNTY.

Those who came here were all repatriated Canadians, except two Irish. My correspondent writes farming has been carried on extensively and large crops produced. Lumbering is also carried on largely and the lumber shipped to the United States and Europe. The county generally prospering. Immigrants would do well to settle in this county. Quite a number applied for lands under the Labour Act. Agriculture the best surety for a living.

QUEEN'S COUNTY.

Quite a number came into this county during the first ten months of 1895, and all Canadians with one exception, and he a Dane, who bought a farm, paying one thousand dollars for it. Prices for other farms bought averaging eight hundred dollars. Some who went in took up lands on a new road opened up last year. There are some fine agricultural lands open for sale in this county, both Crown and private. There is room for a number of hands to assist in agricultural pursuits. Farm help is very scarce, the mills picking up all the spare hands.

CHARLOTTE COUNTY.

Among the immigrants who came during the first ten months of 1895 were many who bought lands and settled on them. Others came returning to old homes, after

having tested the probabilities of success in the United States, and gladly resumed their agricultural pursuits.

Nationalities:—123 Canadians; 25 United States citizens; five Irish. Crops:—General average; dairy business, increasing; other pursuits, prospering.

WESTMORELAND COUNTY.

All who came into this county during the last 10 months are Canadians returning, and bringing their effects with them.

YORK COUNTY.

The immigrants who came into this county during ten months of 1895 were principally Canadians returning to their former homes, and to stay, bringing their effects with them. Canadians, 218; English, five; United States citizens, 15.

Passing the Adams Junction during ten months, there were 440 packages and three carloads of household effects.

CARLETON COUNTY.

All of the immigrants who came into this county during ten months are Canadians returning from the United States with their effects, and to stay. A good many who migrated to Aroostook are wanting to buy farms on our side of the line and move back again. The Bangor & Aroostook Railway advanced the price of land. Many of our farmers own land on both sides of the line, but reside in New Brunswick. We have in this county most excellent soil, and our farmers average more wealth and more comfortable surroundings than the average on the United States side. Our system of mixed farming is preferable to the Aroostook plan of depending largely on potatoes. There are farms for sale at reasonable prices.

VICTORIA COUNTY.

The arrival of immigrants during the last ten months are mixed nationalities: Canadians, 40; Danes, eight; three French returned from the United States, and 33 English from Europe. There are also three Englishmen who have recently bought farms about three miles below the Grand Falls, and they are reported to have brought in cash $15,000 to $20,000, besides effects valued at $1,500.

MADAWASKA COUNTY.

Only one correspondent has replied so far from this growing county. He reports only 29 immigrants reached the county as yet this year. These have all settled. 26 returned Canadians, 2 United States citizens, 1 English. A good field for settlers.

NORTHUMBERLAND COUNTY.

19 Germans and 160 returned Canadians have settled in this county. Among the latter were some who had tried it hard in the United States for ten years, and were glad to get back to Canada. There has been steady work for labourers and good wages. Lumbering and fishing have been fully successful. Farmers have done well, especially with root crops, to which they pay more attention than formerly. Another large pulp mill is in course of construction, which will give work to a good many hands.

RESTIGOUCHE COUNTY.

All the immigrants who came into this county during ten months of 1895 are 83, all Canadians, who have returned with their effects of over $4,000 value. Crops are good, farmers are giving more attention to their legitimate business. Lime-kilns are being built, also steam saw-mills.

GLOUCESTER COUNTY.

All who came into this county during 10 months of 1895, are Canadians returned from the United States, and now settled permanently, 131 in number; and with cheques for $1,000, and effects $400, others with varying amounts. There are some farms for sale at reasonable prices. All Crown lands are under lease for a long time, don't know on what terms they could be got.

KENT COUNTY.

During 10 months of 1895, 85 former residents of the county have returned to their old homes and settled permanently.

Cheese and butter factories are doing very well. The projectors are satisfied with the results, and more are to be built. This year's crop is good and the settlers are satisfied with the localities. This year has been favourable for grain and roots, giving new life to those depending on the farms. Oats are of a better quality than for years past.

KING'S COUNTY.

Our population increasing slowly. Those who came into the county this year for the most part bought lands and built dwellings and roads. The business outlook is good. We have two cheese factories, five steam saw-mills and two water saw-mills. A splendid agricultural county.

CONCLUSION.

The foregoing are all of the counties I have as yet heard from. Those entering the province by other routes than Haliiax and Quebec, so far reported as positively entered, were 1,688. Of these 1,569 were Canadians, 19 Germans, 39 English, 7 Irish, 9 Danes, 42 United States citizens, and 3 French from Old France, bringing with them $49,074 cash and $46,770 worth of effects. Total number of immigrants, including those entered at this agency, 1,826 souls.

The reports above were from highly respectable persons. Many have not yet replied to my inquiries.

I have the honour to be, sir,
Your obedient servant,
S. GARDNER,
Dominion Immigration Agent, St. John, N. B.

Department of the Interior.

LIST of Retail Prices of the ordinary articles of Food required by the Working Classes for 1895.

Provisions.	PRICES.	
	From	To
	$ cts.	$ cts.
Bacon, per lb	0 11	0 14
Bread, best wheat, 2 lb. loaf	0 05	0 06
do brown do	0 05	0 06
Butter, salt, per lb	0 16	0 20
do fresh do roll	0 20	0 25
Beef do when cut, per lb	0 08	0 12
do do per quarter	0 04	0 07
Beer, per quart	0 10	0 00
Candles, per lb. mould	0 12	0 00
Coal oil, per gallon	0 20	0 28
Cheese, per lb	0 12	0 16
Coffee, do ground	0 24	0 40
Cornmeal, for 100 lbs	1 40	1 50
Eggs, per dozen, according to season	0 12	0 30
Flour, per barrel 196 lbs., best	4 00	5 00
do do second best	3 00	4 00
Firewood, per cord, city measure, which is larger by $\frac{8}{16}$ than ordinary	4 50	6 00
Ham, per lb	0 12	0 14
Shoulders, per lb	0 10	0 12
Herrings, per barrel of 200 lbs	3 50	4 00
Mustard, per lb	0 25	0 35
Milk, per quart	0 05	0 06
Mutton, per lb., cut	0 08	0 12
do per quarter	0 06	0 08
Oatmeal, 100 lbs (rolled)	3 00	4 00
Pepper, ground, per lb	0 12	0 15
Potatoes, per bushel	0 40	0 80
Pork, fresh, per lb., cut	0 09	0 12
do do quarter	0 07	0 10
Rice, Arracan, per lb	0 04	0 05
Soap, yellow do	0 05	0 06
Sugar do do	0 03	0 04
Salt, per lb	....	0 01½
Tea, black, per lb	0 25	0 30
do green do	0 40	0 50
Tobacco, per lb	0 35	0 40
Veal do	0 06	0 10

S. GARDNER,

Dominion Government Immigration Agent.

ST. JOHN, N.B., October 31, 1895.

LIST of Retail Prices of Raiment required by the Working Classes for 1895.

Clothing.	PRICES.	
	From	To
	$ cts.	$ cts.
Coats, under, tweed	3 00	3 50
do over do	3 00	4 50
Trousers do	2 00	3 00
Vests do	1 00	2 00
Shirts, flannel, all wool	1 00	1 50
do cotton	0 50	0 75
do under, all wool	0 75	1 00
Hats, hard felt	0 60	0 75
Socks woollen	0 25	0 30
do cotton	0 12	0 20
Blankets, all wool, per pair	2 00	3 00
Rugs do each	0 75	1 40
Flannel, all wool, per yard	0 20	0 30
Cotton shirting, per yard	0 12	0 20
do sheeting do	0 25	0 30
Canadian cloth, tweed	0 40	0 60
Shoes, men's, per pair	1 50	2 00
do women's, do	0 75	1 00
Boots, men's do	2 00	3 00
do women's do	0 75	1 00
India rubber overshoes, per pair	0 60	0 70
do women's	0 50	0 75

S. GARDNER,

Dominion Government Immigration Agent.

ST. JOHN, N.B., October 31, 1895.

STATEMENT of immigration arrivals and departures at St. John Immigration Agency for 10 months ending 31st October, 1895.

Month.	Via Ocean travel.	Sexes.		Children under 12 years.	Total number.	Declared Destination		Nationalities.			Occupation.						Not reported elsewhere for Canada.	Not reported elsewhere for United States.
		Males.	Females.			New Brunswick.	United States.	English.	Scotch.	Scandinavians.	Farmers.	Farm labourers.	General labourers.	Mechanics.	Female domestics.	No class.		
January	1	.....	1	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....
February	9	2	3	4	9	9	.....	8	1	.....	.....	1	.....	.....	3	5	9	.....
March	7	4	3	....	7	7	.....	6	1	.....	3	1	.....	.....	3	.....	7	.....
April	12	10	2	.....	12	12	.....	11	1	....	2	8	.....	....	1	1	12	.....
May	16	12	1	3	16	16	.....	13	2	1	.....	6	.....	.....	1	9	16	....
June	10	9	.....	1	10	10	.....	10	.....	.....	.....	3	.....	2	.....	5	10	.....
July	50	10	22	18	50	50	....	30	20	.....	1	7	.....	2	22	18	50	.....
August	3	1	1	1	3	3	.....	3	1	.....	1	1	.....	.....	1	.....	3	.....
September	13	2	5	2	13	1	.....	12	.....	.....	.....	.....	2	.....	5	6	1	12
October	17	8	5	8	17	17	....	17	.....	.....	1	6	1	.....	5	4	17	.....
	138	58	43	37	138	126	....	111	26	1	8	33	3	4	42	48	126	12

S. GARDNER,
Dominion Government Immigration Agent.

ST. JOHN, N.B., 31st October, 1895.

No. 2.

REPORT OF HALIFAX AGENT.

(Mr. E. M. Clay.)

Dominion Government Immigration Agency,
Halifax, Nova Scotia, 31st October, 1895.

To A. M. Burgess, Esq.,
Deputy Minister of the Interior,
Ottawa.

Sir,—In compliance with instructions from the department, I have the honour herewith to submit for your information a report of the arrival and departure of immigrants at this agency for the ten months ending October 31, 1895.

The arrivals for the ten months has been :

Cabin—Males	3,467	
Females	3,410	
Children	666	
		7,543
Steerage—Males	3,373	
Females	1,258	
Children	904	
		5,535
Grand total		13,078

which shows a decrease from the total arrivals for the same period of the year 1894, of 454 as follows :

January 1st to October 31st, 1894 :

Cabin	7,738	
Steerage	5,794	
		13,532

The arrival of steerage passengers for Canada and United States as compared with the corresponding months of 1894 were as follows :

	1894.	1895.	Decrease.
States	1,484	1,301	183
Canada	4,310	4,234	76
Totals	5,794	5,535	259

by which it will be seen that the actual decrease in arrivals of steerage passengers for the ten months from the arrivals for the corresponding months of 1894, is only 259, or a decrease in those for Canada of 76, and for the United States of 183. A monthly comparison is given in "Statement D."

Department of the Interior.

CLASS OF IMMIGRANTS.

The immigrants arriving have been of about the same class as in former years. The number of European immigrants has not been up to the mark of former years; while Ireland and Scotland have increased their proportion, the English and foreigners, more particularly the latter, have fallen off to a considerable extent.

NEWFOUNDLAND.

The arrivals from Newfoundland have exceeded any former years, and as a whole they have been of a fair class of people; of these a large number have gone into western provinces. Newfoundlanders are classed under English, irish and French.

JUVENILES.

During the ten months I have received fourteen parties of children, representing ten institutions or societies, and while the total number was much smaller than the previous year, and below the average of former years, I can safely say they have been of a superior class, and I have no doubt that this has resulted largely from the careful inspection made both before leaving the old country and after arrival here. Mr. Middlemore again made the Maritime Provinces his field of distribution, and I feel safe in saying that few or no complaints will be made by parties taking any of Mr. Middlemore's children.

I might mention under this head that during the early part of the year it was my privilege, under instructions from the department, to visit a number of Mr. Middlemore's children in this province and Prince Edward Island, and, with one exception, found both children and guardians well satisfied; the exception being a lad placed in Prince Edward Island who seemed to be suffering from what might be called "chronic stupidity."

HEALTH OF IMMIGRANTS.

The health of immigrants during the season has been remarkably good, little or no sickness having been met with. But one death has to be reported, a young man, Patrick McCormick, who died at sea March 18 on ss. "Labrador." Cause of death, apoplexy.

ARRIVALS OF PASSENGER STEAMERS.

During the ten months we have attended and received passenger lists from 192 steamers, as compared with 147 for the same period in 1894.

DISASTERS BY FIRE.

We were visited twice during the winter by fire; the first destroying our buildings at Deep Water, and compelling us to find accommodations at Richmond; but shortly after getting to work there, we were again, by the same cause, driven to find temporary quarters at S. Cunard & Co.'s. Had these fires occurred during the earlier part of the year, the suffering of passengers must have been intense.

GOOD REPORTS FROM SETTLERS.

Reports from immigrants settled in this province continue to be encouraging, and all join in the opinion that Canada is the right place for the right people.

APPENDICES.

For your further information I have attached the usual statements as follows:—

Statement A. Monthly arrival and departure of cabin passengers.
" B. " " " steerage passengers.
" C. Sexes, occupations, and destinations of nationalities.
" D. Monthly arrival of steerage for the ten months in 1894 and 1895.
" E. Comparative statement of nationalities for 1894 and 1895.
" F. Comparative emigration since 1869.
" G. Steamship lines and ports of embarkation.
" H. Sexes, nationalities and destinations of steerage by Allan and Dominion lines.
" I. Juvenile emigration.

CONCLUSION.

In conclusion I have again to thank the customs and railway officials and others with whom I have had to deal for their many acts of kindness in assisting us with the work of looking after the newly arrived emigrants, particularly under the circumstances of our poor accommodations.

I have the honour to be, sir, your obedient servant,

EDWIN M. CLAY.

STATEMENT A.

CABIN PASSENGERS.—Statement showing monthly arrivals and departures at the Halifax, N.S., Agency for the ten months ending October 31, 1895.

MONTHS.	*Via* Ocean Travel.	SEXES.					NATIONALITIES.								REMARKS.
		Adults.		Children.											
		Male.	Female.	Male.	Female.	Totals.	English.	Irish.	Scotch.	Germans.	Scandinavians.	French and Belgians.	Other Countries.	Totals.	
January	232	142	68	12	10	232	112	3	....	....	...	3	114	232	Ultimate destinations of cabin passengers not given on passenger lists.
February	243	174	59	7	3	243	159	2	....	....	1	.....	81	243	
March	365	241	88	17	19	365	206	1	....	....	1	.....	157	365	
April	410	239	148	8	15	410	196	2	5	2	1	3	201	410	
May	479	243	211	7	18	479	75	2	....	2	....	1	399	479	
June	1,188	400	651	71	66	1,188	156	1	....	....	....	4	1,027	1,188	
July	1,839	617	989	118	115	1,839	147	1	....	....	2	12	1,677	1,838	
August	1,290	602	596	46	46	1,290	152	....	1	1	1	1	1,134	1,290	
September	1,019	547	417	31	24	1,019	143	....	....	....	....	2	874	1,019	
October	478	262	183	20	13	478	99	2	2	1	....	13	361	478	
Totals	7,543	3,467	3,410	337	329	7,543	1,445	14	8	6	6	39	6,025	7,543	

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N. S., 31st October, 1895.

STATEMENT B.

STEERAGE PASSENGERS.—Monthly Statement of Immigrant arrivals and departures at the Halifax, N.S., Agency for the ten months ending October 31, 1895.

Months.	Via Ocean Travel.	Sexes.					Declared Destinations.								Nationalities, "Canada."								Occupations, "Canada."							
		Adults.		Children																									
		Male.	Female.	Male.	Female.	Totals.	Lower Provinces.	Quebec.	Ontario.	Manitoba.	North-west Territories.	British Columbia.	United States.	Totals.	English.	Irish.	Scotch.	Germans.	Scandinavians.	French and Belgians.	Other Countries.	Totals.	Farmers.	Farm labourers.	General labourers.	Mechanics.	Clerks, &c.	Domestics.	Not classed.	Totals.
January	374	250	79	23	22	374	96	72	80	41	2	16	67	374	182	13	13	9	8	17	65	307	25	....	113	46	35	17	71	307
February ...	504	298	107	66	33	504	92	107	99	60	19	11	116	504	315	25	10	2	4	7	25	388	26	1	115	57	43	31	115	388
March.....	891	644	161	32	54	891	242	80	200	117	44	21	187	891	515	44	31	18	21	30	45	704	84	19	264	81	51	38	167	704
April..	2073	1377	313	287	96	2073	495	120	554	343	129	42	390	2073	1216	77	213	31	46	63	37	1683	110	7	820	109	43	66	528	1683
May	431	325	79	14	13	431	360	....	....	3	....	....	68	431	339	6	10	4	1	....	3	363	3	....	239	25	2	45	49	363
June.....	453	194	122	76	61	453	358	3	3	1	3	1	84	453	295	2	23	2	2	....	45	369	4	1	131	17	6	42	168	369
July	188	78	75	21	14	188	126	1	3	....	....	....	58	188	86	6	16	....	3	3	16	130	1	..	40	7	7	19	56	130
August	195	67	95	16	17	195	99	1	3	....	....	2	90	195	79	....	10	....	....	....	16	105	....	....	20	5	9	26	45	105
September..	234	72	127	19	16	234	79	....	1	....	....	....	154	234	45	....	2	2	2	....	29	80	....	....	12	4	12	20	32	80
October.....	192	68	100	11	13	192	100	....	....	....	....	5	87	192	70	1	5	1	....	22	6	105	....	....	39	4	1	26	35	105
Totals ..	5535	3373	1258	565	339	5535	2047	384	943	565	197	98	1301	5535	3142	174	333	69	87	142	287	4234	253	28	1793	355	209	330	1266	4234

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N.S, 31st October, 1895.

STATEMENT C.

SHOWING Sexes, Occupations and Destinations of the *different nationalities* remaining in Canada.

Nationalities.	SEXES.					OCCUPATIONS.								DESTINATIONS.								
	Adults.		Children.																			
	Males.	Females.	Males.	Females.	Totals.	Farmers.	Farm labourers.	General labourers.	Mechanics.	Clerks, &c.	Domestics.	Not classed.	Totals.	Nova Scotia.	New Brunswick.	P. E. Island.	Quebec.	Ontario.	Manitoba.	North-west Territories.	British Columbia.	Totals.
English	2017	640	307	178	3142	177	15	1400	282	143	264	861	3142	1529	119	18	252	646	371	122	85	3142
Irish	111	49	3	11	174	27	8	56	8	12	24	39	174	34	6	..	32	43	41	15	3	174
Scotch	156	51	109	17	333	20	5	91	26	14	13	164	333	77	9	....	15	190	17	20	5	333
Germans	38	15	6	10	69	7	...	22	6	3	....	31	69	11	2	2	12	12	22	8	....	69
Scandinavians	56	18	6	7	87	8	....	43	2	3	5	26	87	11	7	....	12	17	30	8	2	87
French and Belgians	93	22	14	13	142	6	...	78	4	5	9	40	142	48	....	....	26	2	45	21	....	142
Russians	27	9	11	6	53	1	....	11	5	10	....	26	53	16	6	....	5	6	14	3	3	53
Russian Jews	8	.....	.....	.....	8	.....	....	4	1	3	.....	.....	8	4	...	.....	.....	2	2	.....	.....	8
Russian Poles	2	5	6	2	15	2	....	.....	.....	.....	.....	13	15	.....	.....	.....	.....	.....	15	.....	.....	15
Russian Fins	3	2	1	3	9	..	....	3	.....	.....	1	5	9	.....	2	.....	.....	.....	7	.....	.....	9
Austrians	1	..	.....	.....	1	.....	...	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1
Hungarians	.....	1	..	....	1	.....	....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1
Italians	4	1	.....	.....	5	.....	....	4	.....	.....	.....	1	5	5	.....	.....	.....	.....	.....	.....	.....	5
Greeks	2	.....	.....	.....	2	..	....	2	..	.....	.....	.....	2	.....	.....	.....	2	.....	.....	.....	.....	2
Arabians	2	2	...	.....	4	.....	....	2	.....	.....	.....	2	4	.....	.....	.....	4	.....	.....	.....	.....	4
Swiss	1	.....	.....	.....	1	1	...	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	1
East Indians	.....	1	.....	.....	1	.....	....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1
Chinese	1	.....	.....	.....	1	.....	....	1	.....	.....	.....	.....	1	1	...	.....	.....	.....	.....	.....	.....	1
United States citizens	19	1	.....	...	20	...	....	14	2	3	1	...	20	19	.....	.....	.....	1	.....	.....	.....	20
Canadians	97	36	19	14	166	4	....	61	19	13	11	58	166	100	15	5	24	22	.....	.....	.....	166
Totals	2638	853	482	261	4234	253	28	1793	355	209	330	1266	4234	1856	166	25	384	943	565	197	98	4234

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N.S., 31st October, 1895.

STATEMENT D.

SHOWING Monthly Arrivals for the ten months ending October 31, 1895, and corresponding months of 1894, with Increase and Decrease.

MONTHS.	Canada.		Increase.	Decrease.	United States.		Increase.	Decrease.	Total Arrivals.		Increase.	Decrease.
	1894.	1895.			1894.	1895.			1894.	1895.		
January	253	307	54	....	103	67	....	36	356	374	18	....
February	348	388	40	....	135	116	....	19	483	504	21	....
March	825	704	....	121	334	187	....	147	1,159	891	....	268
April	2,308	1,683	....	625	530	390	....	140	2,838	2,073	....	765
May	68	363	295	....	2	68	66	....	70	431	361	....
June	227	369	142	....	20	84	64	....	247	453	206	....
July	72	130	58	....	25	58	33	....	97	188	91	....
August	83	105	22	....	286	90	....	196	369	195	....	174
September	57	80	23	....	25	154	129	....	82	234	152	....
October	69	105	36	....	24	87	63	....	93	192	99	....
	4,310	4,234	670	746	1,484	1,301	355	538	5,794	5,535	948	1207

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N.S., 31st October, 1895.

STATEMENT E.

COMPARATIVE STATEMENT of Nationalities for 1894 and 1895, showing percentage of Decrease and Increase.

Nationalities.	1894.	1895.	Increase.	Decrease.	Per Cent.
English	3,799	3,142	.....	657	17
Irish	120	174	54	.....	45
Scotch	274	333	59	.....	22
Germans	226	69	.....	157	70
Scandinavians	173	87	.....	86	50
French and Belgains	196	142	.....	54	28
Other Countries	549	287	.....	262	48

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N.S., 31st October, 1895.

STATEMENT F.—Comparative Statement of the Immigration at Halifax, N.S., Agency, from 1st January, 1869, to 31st October, 1895, by years.

Year.	Sexes.				Nationalities.					Remarks.
	Males.	Females.	Children.	Totals.	English.	Irish.	Scotch.	Others.	Totals.	
1869....	289	73	74	436	.....	.....	.....	.....	436	No record of nationalities.
1870....	258	101	78	437	214	93	102	28	437	
1871....	317	132	101	550	339	40	72	99	550	
1872....	689	396	347	1,432	1,187	88	137	20	1,432	
1873....	1,037	414	202	1,653	972	22	117	542	1,653	
1874....	781	321	423	1,525	889	78	167	391	1,525	
1875....	374	136	233	743	551	44	21	127	743	
1876....	320	90	106	516	409	18	21	68	516	
1877....	607	200	124	931	580	99	35	217	931	
1878....	1,256	429	366	2,051	1,280	329	133	309	2,051	
1879....	2,503	751	701	3,955	2,516	706	67	666	3,955	
1880....	1,921	626	548	3,095	1,754	681	165	495	3,095	11 months.
1881....	2,028	801	817	3,646	2,248	766	223	409	3,646	13 do
1882....	4,970	2,086	1,667	8,723	5,597	999	514	1,613	8,723	
1883....	4,589	2,029	1,857	8,475	5,435	1,178	237	1,625	8,475	
1884....	3,033	1,193	1,378	5,604	4,097	637	190	680	5,604	
1885....	2,440	958	1,029	4,427	2,906	539	262	720	4,427	
1886....	3,305	1,302	1,049	5,656	4,336	488	511	321	5,656	
1887....	6,305	2,532	1,837	10,674	7,261	839	694	1,880	10,674	
1888	9,030	3,410	2,613	15,053	9,785	750	1,327	3,191	15,053	This statement does not include cabin passengers.
1889....	7,430	3,054	1,844	12,328	6,303	370	1,027	4,628	12,328	
1890....	5,817	2,180	1,440	9,437	5,952	259	588	2,638	9,437	
1891....	5,996	2,555	1,567	10,118	6,203	181	602	3,132	10,118	
1892....	7,256	2,635	1,958	11,849	6,357	190	431	4,871	11,849	
1893....	10,611	3,929	3,592	18,132	6,160	224	371	11,377	18,132	
1894....	3,854	1,571	1,721	7,146	4,159	142	275	2,570	7,146	
1895....	3,373	1,258	904	5,535	4,048	179	347	961	5,535	10 months.

Total..... 154,127

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N.S., 31st October, 1895.

STATEMENT G.—Immigrant Arrivals at Halifax, N.S., Agency for ten months ending 31st October, 1895, showing Steamship Lines and Ports of Embarkation.

STEAMSHIP LINE.	SERVICE.	ENGLISH PORTS.		SCOTCH PORTS.		IRISH PORTS.		NEWFOUNDLAND PORTS.		
		Liverpool.	Other Ports in England.	Glasgow.	Other Ports in Scotland.	Londonderry.	Other Ports in Ireland.	St. John's.	Other Ports in Newfoundland.	Other Ports.
Allan	Weekly	1,185				97				
do	Fortnightly	400						479		
do	Extra	123		183		2				
Dominion	Weekly	1,240				35				
Furness	Fortnightly	2						12		
Newfoundland Coastal SS. Co	do (3 months)							752		
Red Cross	Weekly							927		
Other Lines								44		54
Total		2,950		183		134		2,214		54

RECAPITULATION.

English Ports	2,950
Scotch do	183
Irish do	134
Newfoundland Ports	2,214
Other Ports	54
Total	5,535

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N.S., 31st October, 1895.

STATEMENT H.

SEXES, Nationalities, and Destinations of Steerage Passengers landed at the Halifax, N. S., Agency for ten months ending 31st October, 1895, by the Allan and Dominion Lines.

LINE	SEXES.					NATIONALITIES.								DESTINATIONS.									
	Adults.		Children																				
	Male.	Female.	Male.	Female.	Totals.	English.	Irish.	Scotch.	Germans.	Scandinavians.	French and Belgians.	Other Countries.	Totals.	Nova Scotia.	N. Brunswick.	P. E. Island.	Quebec.	Ontario.	Manitoba.	N. W. Territories.	British Columbia.	States.	Totals.
Allan—Weekly	867	224	114	77	1,282	817	120	86	35	76	50	98	1,282	159	27	....	184	314	302	130	44	122	1,282
do Fortnightly	443	239	108	89	879	668	17	72	5	33	8	75	879	688	63	14	7	14	11	7	5	70	879
do Extra	164	29	106	9	308	64	13	181	14	10	11	15	308	28	2	....	14	192	45	5	....	22	308
Dominion	783	235	162	95	1,275	876	34	5	65	104	52	139	1,275	135	32	....	170	409	204	55	43	227	1,275
Totals	2,257	727	490	270	3,744	2425	184	344	119	223	121	328	3,744	1,010	124	14	375	929	562	197	92	441	3,744

Total 3,744
By other boats 1,791

5,535

HALIFAX, N.S., 31st Oct., 1895.

EDWIN M. CLAY,
Dominion Immigration Agent.

STATEMENT I.—showing the number of Juvenile Immigrants landed at the Halifax, N.S., Agency for the ten months ending October 31st, 1895.

Steamers.	Date of Arrival.	By whom sent.	Sexes.					Destination.
			Over 18.		Under 18.		Totals.	
			M.	F.	M.	F.		
Laurentian	Feb. 17	Mrs. Birt	3	.....	10	30	43	Knowlton.
Vancouver	do 24	Bristol Em. Society	1	.....	1	4	6	St. John, N.B.
Mongolian	Mar. 18	Miss Rye	.....	1	.....	29	30	Niagara.
do	do 18	Miss Stirling	.....	.....	2	.....	2	Aylesford, N.S.
Parisian	April 1	Dr. Barnardo	22	.....	10	.....	32	Russell, Man.
Vancouver	do 7	Rev. R. Wallace	1	.....	83	14	98	Belleville.
do	do 7	Dr. Stephenson	7	.....	35	.....	42	Hamilton.
do	do 7	Bristol Em. Society	.....	.....	3	.....	3	St. John, N.B.
Siberian	do 9	Mr. Quarrier	7	.....	131	.....	138	Brockville.
Numidian	do 14	Rev. R. Wallace	3	.....	10	.....	13	
do	do 14	Mr. Fegan	.....	.....	1	.....	1	Toronto.
Oregon	do 21	Bristol Em. Society	.....	.....	3	.....	3	St. John, N.B.
Carthaginian	May 17	do do	.....	.....	5	.....	5	do
do	June 28	Mr. Middlemore	1	1	47	22	71	Lower Provinces.
		Totals	45	2	341	99	87	

EDWIN M. CLAY,
Dominion Immigration Agent.

HALIFAX, N.S., 31st October, 1895.

No. 3.

REPORT OF QUEBEC AGENT.

(Mr. P. Doyle).

Dominion Government Immigration Office,
Quebec, 31st October, 1895.

A. M. Burgess, Esq.,
Deputy Minister of the Interior,
Ottawa.

Sir,—I have the honour to submit to you my annual report upon the operations o this agency, together with tabular statements showing the arrivals and departures o immigrants up to 31st October, 1895.

The arrivals up to 31st October, compared with those of the same period in 1894 were as follows :—

—	1894.		1895.		Increase.	Decrease.
	Cabin.	Steerage.	Cabin.	Steerage.		
England	3,725	12,012	3,572	11,952		213
Ireland	47	546	83	556	46	
Scotland	18	608	51	649	74	
Germany	5	1.493		1,469		29
Belgium	1	1,186		477		710
Netherlands		113				113
Norway		232				232
Sweden		347				347
	3,796	16,537	3,706	15,103	120	1,644
		3,796		3,706		120
Grand Total		20,333		18,809		1,524

showing a decrease of 1,524.

The total number of steamships arrived with passengers was 87 ; tonnage, 234,457.

The average passage of the Allan Line was : Weekly steamers from Liverpool, 9½ days ; Londonderry, 8¾ days. Glasgow steamers, from Glasgow, 11 days. Dominion Line, weekly steamers from Liverpool, 9 days ; Londonderry, 7½ days. Beaver Line, weekly steamers from Liverpool, 10½ days. Hansa Line, steamers from Hamburg, 17¼ days ; Antwerp, 13 days.

The number of cabin and steerage by each line was as follows :—

——	Cabin.	Steerage.	Total.
ALLAN LINE.			
Weekly steamers from Liverpool	1,643	6,550	8,193
do Londonderry	83	535	618
Glasgow steamers from Glasgow	51	649	700
	1,777	7,734	9,511
DOMINION LINE.			
Weekly steamers from Liverpool	1,425	4,043	5,468
do Londonderry		21	21
	1,425	4,064	5,489
BEAVER LINE.			
Weekly steamers from Liverpool	504	1,359	1,863
HANSA LINE.			
Steamers from Hamburg		1,469	1,469
do Antwerp		477	477
		1,946	1,946
Grand Total	3,706	15,103	18,809

THE nationalties of the passengers brought out by each line were as follows :—

	English.	Irish.	Scotch.	Germans.	Scandinavians.	French and Belgians.	Icelanders.	Russians.				Italians.	Austrians.	Swiss.	Hollanders.	Bohemians.	Hungarians.	Assyrians.	Roumanians.	Arabs.	Turks.	Egyptians.	Spaniards.	Greeks.	Armenians.	Canadians.	Totals.
								Russians.	Jews.	Poles.	Finns.																
• *Allan Line.*																											
Weekly Liverpool	5,6 7	89	2 9	306	853	165	4	243	1	49	220	16	26	4	10	2	14	....	2		35	....	....	....	56	65	8,193
do Londonderry	12	600	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	618
do Glasgow	...	...	671	...	.....	...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	.....	.....	.....	.....	..	700
	5,639	6 9	961	306	85	165		243	113	49	220	16	26	4	10	2	14	....	2	5	6.	....	..	....	56	69	9,511
Dominion Line.																											
Weekly Liverpool	3,905	43	15	373	609	150	....	78	9	66	60	....	4)	1	6	....	13	....	6	....	....		....	....	9	1	5,468
do Londonderry			....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
	3,9	6	15	373	609	150	....	78	89	66	60	...	40	1		....	13	...		...	....	4	....	....	9	1	5,489
Beaver Line.																											
Weekly Liverpool	1,003	31	8	164	9	33	....	56	35	0	13	1	56	....	3	....	3	3		....	1	....	3	....	15	6	1,903
Hansa Line.																											
Weekly Hamburg	.....	....	...	8,		8	....	221	61	...	1	1	12	....	4	6	82	....	23	....	....	....	....	....	46	1	1,469
do Antwerp	267	....	....	78	.....	43	..	....	25	.....	...	7	17	12	5	....		....	3	....	6	....	....	2	2	4	477
	267	....	....	6 5	8	51	....	221	86	....	1	8	13	12	9	6	88	....	26	....	6	....	....	2	48	5	1,946
Totals	0,822	776	984	1,59	1,509	399		568	94	145	294	37	259	17	28	8	11	3	40	5	69	4	3	2	12	155	18,809

The following table gives the number of male and female adults and the sexes of children and infants of each nationality arrived in 1895.

—	Adults.		Children.		Infants.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	
English	5,413	3,348	1,045	809	110	97	10,822
Irish	403	292	32	37	4	8	776
Scotch	385	346	90	147	6	10	984
Germans	631	452	197	165	38	25	1,508
Scandinavians	681	509	153	129	17	20	1,509
French and Belgians	227	86	41	32	6	7	399
Icelanders	4	3	.....	.....	.....	.....	7
Russians	205	149	94	89	18	13	568
do Jews	299	257	182	175	20	8	41
do Poles	40	55	25	20	4	1	145
do Fins	140	86	29	26	6	7	294
Italians	22	4	4	6	.....	1	37
Austrians	107	92	29	23	5	3	259
Swiss	10	6	1	.....	.....	.....	17
Hollanders	16	7	3	1	.....	1	28
Bohemians	3	1	4	.....	.....	.....	8
Hungarians	37	32	24	18	3	4	118
Assyrians	1	2	.....	.....	.....	.....	3
Roumanians	10	11	6	10	1	2	40
Arabs	3	2	.....	.....	.....	.....	5
Turks	20	16	18	9	3	3	69
Egyptians	4	.....	.....	.....	.....	.....	4
Spaniards	3	.....	.....	.....	.....	.....	3
Greeks	2	.....	.....	.....	.....	.....	2
Armenians	70	31	13	9	4	1	128
Canadians	92	28	8	5	1	1	135
Totals	8,828	5,815	1,998	1,710	246	212	18,809

The trades and callings of the male steerage passengers, as per passenger lists, were as follows :—

Farmers	571
Farm labourers and labourers	5,457
Mechanics	783
Clerks, traders, &c	171
Total	6,982

Department of the Interior.

TABLE showing the number of Immigrants landed at Quebec, assisted to emigrate by various Societies during the Year 1895.

By Whom Sent.	Adults.		Children		Infants.		Total.	Destination.
	Male.	Female.	Male.	Female.	Male.	Female.		
Self Help Emigration Society, London, Eng	115	7	3	7	1	...	133	General.
The Sheltering Homes, Liverpool, Eng	30	26	13	20	....	....	89	Knowlton, P.Q.
Young Colonist Aid Association, London, Eng	12	....	....	....	....	....	12	Winnipeg.
Boys' Home, Southwark	39	....	54	....	....	....	93	General.
Children's Aid Society, London	11	....	....	....	....	....	11	Winnipeg.
Miss Macpherson	15	11	17	10	....	....	53	Niagara.
The Liverpool Farm School and Children's Aid Society	4	....	....	....	....	....	4	Winnipeg.
Waifs and Strays Association, London, Eng	28	2	....	....	....	....	30	Sherbrooke, P.Q
Hon. Mrs. Joyce \ United British Women's Emigra-	9	103	2	3	....	1	118	General.
Hon. Mrs. Joyce / tion Association, London, Eng..	1	6	1	....	....	....	8	United States.
The Salford Boys and Girls Refuge and Homes, Strangeways, Manchester	....	24	....	9	....	....	33	Belleville, Ont.
The Committee of Park Row Industrial School, Bristol	3	....	....	....	....	....	3	New Glasgow.
Liverpool Catholic Children's Protective Society	8	15	33	19	....	....	75	Montreal.
Bristol Emigration Society.	7	6	8	2	....	....	23	General.
The Wellington Farm School, By Penecuik, Scotland	2	....	....	....	....	....	2	St. John, N.B.
East End London Emigration Fund	5	....	....	....	....	....	5	Montreal.
The Southwark Diocesan Education Council and Rescue Society, London	28	....	3	....	....	....	31	Ottawa.
Salford Catholic Protection and Rescue Society	13	6	12	12	....	....	43	General.
Orphan Boys' Home of Scotland, Mr. Quarrier	....	55	14	55	....	....	124	Brockville.
Canadian Catholic Emigration Committee, London, England	39	....	1	....	....	....	40	Montreal.
Rev. Mr. Wallace	10	11	6	13	....	....	40	Belleville.
Glasgow Juvenile Delinquency Board	1	17	....	....	....	....	18	General.
Bedfordshire Reformatory, Carton, Bedford	6	....	....	....	....	....	6	Melbourne, P.Q.
Dr. Barnardo, London, Eng	189	91	150	64	....	....	494	Toronto & Man.
Red Hill Reformatory, Surrey, Eng	4	....	....	....	....	....	4	Wapella.
Blackfriars Home, Southwark, London	2	....	....	....	....	....	2	Montreal.
Miss Rye	....	18	....	26	....	....	44	Niagara.
Philantrophic Society Farm School, London, Eng	3	....	....	....	....	....	3	Wapella.
Cumberland Industrial School, Cockermouth	2	....	....	....	....	....	2	Huntingdon P.Q
Tiffield Reformatory, Northamptonshire	2	....	....	....	....	....	2	Richmond, P.Q.
The Sattley Reformatory, Birmingham	1	....	....	....	....	....	1	Richmond, P.Q.
Church Emigration Society, London, Eng	....	2	....	....	....	....	2	Montreal
Total	589	400	317	240	1	1	1548	

STATEMENT of the number of Immigrants arrived at the Port of Quebec, distinguishing the countries from whence they sailed, up to the 31st of October, 1894 and 1895.

——	1894.	1895.
England—		
Liverpool	15,737	15,524
Ireland—		
Londonderry	593	639
Scotland—		
Glasgow	626	700
Germany—		
Hamburg	1,4 8	1,469
Belgium—		
Antwerp	1,187	477
Netherlands—		
Flushing	113	
Norway—		
Christiania	232	
Sweden—		
Gottenburg	347	
	20 333	18 809

COMPARATIVE STATEMENT of the number of Immigrants arrived at the Port of Quebe since the Year 1829 to 1895 inclusive.

Years.	England.	Ireland.	Scotland.	Germany and Norway.	Other Countries.	Totals.
1829 to 1833	43,386	102,266	20,143	15	1,889	167,699
1834 to 1838	28,561	54,904	11,061	485	1,346	96,357
1839 to 1843	30,791	74,981	16,311	.....	1,777	123,860
1844 to 1848	60,458	112,192	12,797	9,728	1,219	196,394
1849	8,980	20,126	4,984	436	968	38,494
1850	9,887	17,976	2,879	849	701	32,292
1851	9,677	22,381	7,042	870	1,106	41,076
1852	9,276	15,983	5,477	7,256	1,184	39,176
1853	9,585	14,417	4,745	7,456	496	36,699
1854	18,176	16,165	6,446	11,537	857	53,180
1855	6,754	4,106	4,859	4,564	691	21,274
1856	10,353	1,688	2,794	7,343	261	22,439
1857	15,471	2,016	3,218	11,368	24	32,097
1858	6,441	1,153	1,424	3,578	214	12,810
1859	4,846	417	793	2,722	.....	8,778
1860	6,481	376	979	2,314	.....	10,150
1861	7,780	413	1,112	10,618	.....	19,924
1862	6,877	4,545	2,929	7,728	47	22,176
1863	6,317	4,949	3,959	4,182	12	19,419
1864	5,013	3,767	2,914	7,453	.....	19,147
1865	9,296	4,682	2,601	4,770	6	21,355
1866	7,235	2,230	2,222	16,958	3	28,648
1867	9,509	2,997	1,793	16,453	5	30,757
1868	16,173	2,585	1,924	13,607	11	34,300
1869	27,876	2,743	2,867	9,626	2	43,114
1870	27,183	2,534	5,356	9,396	6	44,475
1871	23,710	2,893	4,984	5,391	42	37,020
1872	21,712	3,274	5,022	4,414	321	34,743
1873	25,129	4,236	4,803	2,010	723	36,901
1874	17,631	2,503	2,491	857	412	23,894
1875	12,456	1,252	1,768	.....	562	16,038
1876	7,720	688	2,131	.....	362	10,901
1877	5,927	663	829	.....	324	7,743
1878	7,500	913	1,425	.....	457	10,295
1879	14,113	1,088	1,602	.....	448	17,251
1880	18,647	2,485	2,845	.....	1,020	24,997
1881	24,426	2,480	2,861	.....	471	30,238
1882	33,650	5,992	4,476	.....	732	44,850
1883	29,003	10,638	5,460	.....	865	45,966
1884	24,035	3,590	3,075	.....	829	31,529
1885	13,178	1,632	1,942	.....	278	17,030
1886	17,626	2,148	2,766	.....	242	22,782
1887	25,100	2,436	4,874	.....	339	32,749
1888	22,377	1,631	4,375	.....	147	28,530
1889	17,784	1,344	2,906	.....	57	22,091
1890	17,675	1,170	2,320	.....	.....	21,165
1891	20,327	903	2,177	28	.....	23,435
1892	24,500	925	1,762	181	54	27,422
1893	33,628	873	1,672	5,340	5,375	46,888
1894 to October 31st	15,737	593	626	2,077	1,300	20,333
1895 do do	15,524	639	700	1,469	477	18,809
	891,496	552,581	203,571	193,379	28,662	1,869,689

The immigrants who arrived during the season of 1895 were, generally speaking, people in possession of considerable means, those destined for the older provinces going to join friends, and those for the prairie provinces with the intention of commencing farming at once, whilst of those bound for British Columbia the larger portion seemed to be enterprising people with ample means to purchase farms or enter into any branch of business offering a safe investment.

The health of the immigrants has been exceptionally good.

The demand for farmers, ploughmen and farm labourers has been equal to that of former years, but, as usual, the supply fell short of the demand. The demand for these classes is increasing yearly and employment can be found for them on arrival.

Many who arrived early in the season were able to send for their families, or portion of them left behind.

The scarcity of domestic servants has been quite as marked during the past season as at any previous time; this class of immigrants have had no difficulty getting ready employment at good wages.

To all appearances the demand for farm labourers and domestic servants will be as great as usual the coming season especially if well qualified and from the rural districts.

The Scandinavians, Germans, French and Belgians who settled in this country during the past year, were of the very best possible type of practical farmers, who no doubt will push their way to comfort and ease by their steady and industrious habits, and prove a valuable addition to our agricultural population, and be the means of attracting a large number of their countrymen to our shores.

The whole respectfully submitted.

I have the honour to be, sir,
Your obedient servant,

P. DOYLE,
Dominion Government Immigration Agent.

STEERAGE PASSENGERS.

STATEMEMT of Immigration Arrivals and Departures at Quebec Immigration Agency up to 31st October, 1895.

MONTHS.	Arrived via Ocean Travel.	SEXES.				Total number of souls.	DECLARED DESTINATIONS.							NATIONALITIES.									OCCUPATIONS.								
		Adults.		Children			Lower Provinces.	Quebec.	Ontario.	Manitoba.	North-west Territories.	British Columbia.	United States.	English.	Irish.	Scotch.	Germans.	Scandinavians.	French and Belgians.	United States.	Canadians.	Other countries.	Farmers.	Farm Labourers.	Labourers.	Mechanics.	Clerks and Traders.	Female Domestics.	Not classified.	For Canada, not reported elsewhere.	For United States, not reported elsewhere.
		Males.	Females.	Males.	Females.																										
January...	.....	....	....	....	....	.....	....	...	....	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
February..	.....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
March	.....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
April.....	.....	....	....	....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
May ...	3604	1886	821	517	380	3604	17	1132	781	593	185	95	801	1827	213	212	413	369	131	24	9	406	190	328	1134	176	58	295	1423	2803	801
June. ...	2620	1176	729	349	366	2620	24	673	524	308	80	57	954	1061	124	236	292	394	70	6	11	426	104	221	709	116	26	265	1179	1666	954
July	2418	1123	679	396	220	2418	36	686	502	311	52	41	787	1089	63	168	281	190	69	4	16	538	89	198	686	122	28	272	1023	1631	787
August....	2133	1041	705	175	218	2139	15	703	584	224	39	66	508	1206	123	136	131	181	37	14	26	285	78	205	578	152	28	278	820	1631	508
September.	2715	1103	805	414	396	2718	17	744	683	108	49	62	1055	1348	126	121	167	246	69	57	47	537	59	152	723	147	22	262	1353	1663	1055
October....	1604	653	554	214	183	1604	28	416	272	86	37	39	726	719	44	60	224	129	23	16	26	363	51	92	431	70	9	175	776	878	726
	15103	6982	4293	2065	1763	15103	137	4345	3346	1633	442	360	4831	7250	693	933	1508	1509	399	121	135	2555	571	1196	4261	783	171	1547	6574	10272	4831

P. DOYLE,
Dominion Government Immigration Agent.

QUEBEC, 31st October, 1895.

STEERAGE PASSENGERS REMAINING IN CANADA.

STATEMENT of Arrivals and Departures at Quebec Agency up to 31st October, 1895.

MONTH.	Arrived via Ocean Travel.	SEXES.				DECLARED DESTINATIONS.						NATIONALITIES.									OCCUPATIONS.							
		Adults.		Children		Lower Provinces.	Quebec.	Ontario.	Manitoba.	North-west Territories	British Columbia.	English.	Irish.	Scotch.	Germans.	Scandinavians.	French and Belgians.	United States Citizens.	Canadians.	Other Countries.	Farmers.	Farm Labourers.	Labourers.	Mechanics.	Clerks.	Domestics.	Not Classified.	Total.
		Males.	Females.	Males.	Females.																							
January	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	2803	1486	611	415	291	17	1132	781	593	185	95	1739	194	184	174	106	125	6	9	266	167	282	837	148	52	235	1082	2803
June	1666	812	413	208	233	24	673	524	308	80	57	996	112	226	65	71	64	....	11	121	81	168	445	93	25	176	678	1666
July	1631	839	399	270	123	36	686	502	314	52	41	1040	58	157	55	48	63	3	16	191	80	166	478	90	25	159	633	1631
August	1631	841	518	119	153	15	703	584	224	39	66	1117	110	135	48	54	37	3	26	101	66	188	422	139	26	201	589	1631
September	1663	644	477	281	261	17	744	683	108	49	62	1174	115	120	48	29	65	2	43	67	48	125	358	94	19	181	838	1663
October	878	384	295	103	96	28	416	272	86	37	39	614	33	57	44	17	18	....	26	69	37	73	228	38	8	109	385	878
	10272	5006	2713	1396	1157	137	4354	3346	1633	442	360	6680	622	879	434	325	372	14	131	815	479	1002	2768	602	155	1061	4205	10272

P. DOYLE,
Dominion Government Immigration Agent.

QUEBEC, 31st October, 1895.

STEERAGE Passengers destined for the United States up to 31st October, 1895.

MONTHS.	Arrived *via* Ocean Travel.	SEXES.				NATIONALITIES.									OCCUPATIONS.							Total.
		Adults.		Children		English.	Irish.	Scotch.	Germans.	Scandinavians.	French and Belgians.	United States Citizens.	Canadians.	Other Countries.	Farmers.	Farm Labourers.	Labourers.	Mechanics.	Clerks and Traders.	Female Domestics.	Not Classified.	
		Males.	Females.	Males.	Females.																	
January																						
February																						
March																						
April																						
May	801	400	210	102	89	88	19	28	239	263	6	18	....	140	23	46	297	28	6	60	341	801
June	954	364	316	141	133	65	12	10	227	323	6	6	....	305	23	53	264	23	1	89	501	954
July	787	284	280	126	97	49	5	11	226	142	6	1	....	347	9	32	208	32	3	113	390	787
August	508	200	187	56	65	89	13	1	83	127	....	11	....	184	12	17	156	13	2	77	231	508
September	1,055	459	328	133	135	174	11	1	119	217	4	55	4	470	11	27	365	53	3	81	515	1,055
October	726	269	259	111	87	105	11	3	180	112	5	16	....	294	14	19	203	32	1	66	391	726
	4,831	1,976	1,580	669	606	570	71	54	1,074	1,184	27	107	4	1,740	92	194	1,493	181	16	486	2,369	4,831

P. DOYLE,
Dominion Government Immigration Agent

QUEBEC, 31st October, 1895.

CABIN PASSENGERS.

STATEMENT of Immigrant Arrivals and Departures at Quebec Immigration Agency up to 31st October, 1895.

MONTHS.	Arrived via Ocean travel.	SEXES.				NATIONALITIES REMAINING IN CANADA.			For Canada, not reported elsewhere.
		Adults.		Children					
		Males.	Females.	Males.	Females.	English.	Irish.	Scotch.	
January	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	....	.....	.....	.....	.....
March	...	...	....	....	....	.....	.....	.....	.....
April	....	....	....	....	....	.....	.....	.....	.....
May	457	221	178	29	29	444	4	9	457
June	436	206	198	23	9	422	14	.....	436
July	446	250	160	16	20	434	.....	12	446
August	1,045	572	372	51	50	1,013	23	9	1,045
September	892	407	405	43	37	838	40	14	892
October	430	190	209	17	14	421	2	7	430
	3,706	1,846	1,522	179	159	3,572	83	51	3,706

P. DOYLE,
Dominion Government Agent.

QUEBEC, 31st October, 1895.

No. 4.

REPORT OF THE IMMIGRATION AGENT AT MONTREAL.

(Mr. John Hoolahan.)

Dominion Government Immigration Agency,
Montreal, 31st October, 1895.

A. M. Burgess, Esq.,
Deputy Minister of the Interior,
Ottawa.

Sir,—I have the honour to submit for your information the annual report of the Dominion Government Immigration Agency at Montreal, for the ten months ending the 31st October, 1895, together with the annexed statements or abstracts :—

STATEMENT A

Shows the number of immigrants, arrivals and departures, via the United States, together with their nationalities, destinations, &c.

STATEMENT B

Shows the number and destination of the immigrant children arrived.

STATEMENT C.

The report of applications for help at the Montreal agency in the city and the district of Montreal.

STATEMENT D.

The report showing the retail prices of food, fuel and clothing in Montreal.

STATISTICAL INFORMATION.

A record is kept at this agency of the immigrant arrivals at Montreal via the United States. Statement A gives full particulars of the same. No record is, however, kept here of European immigrants via the St. Lawrence route, as all such immigrants are now landed at Quebec or Halifax, as the case may be, and are taken account of at these ports.

STEAMSHIP AND RAILWAY COMPANIES.

I am gratified to be able to report that the transportation of the immigrants and their effects by the steamship and railway companies has been satisfactory ; that no serious accident to any of the immigrant passengers occurred whilst en route, and that no valid complaint was preferred by any of the immigrants against the officers or employees of the companies for incivility or inattention, is good proof that our immigrants have been well treated and carefully looked after.

HEALTH OF THE IMMIGRANTS.

The general health of the immigrants of the year was good. With the exception of a few cases of sickness and the death of a child, we would be able to present a clean bill of health.

GARDENERS AND FLORISTS.

There is a good demand in the spring for competent men in these branches, provided they are sober and industrious.

FEMALE DOMESTIC SERVANTS.

I may say that the demand for female domestics continues far greater than the supply. The applications coming into this office treble the arrivals, and women of this class secure situations as soon as they reach the city. The wages given are good, and it matters little at what season of the year they come. There is always work for them.

FARM LABOURERS.

The same remarks apply to farm labourers, but only in the spring and summer. A competent farm hand, and even a young man anxious to learn, can always secure a situation in any part of the district of Montreal, and applications for them are received also from Ontario. Almost all the immigrants applying to the office had places found for them.

GENERAL LABOURERS.

Employment was fair to good for the unskilled labourer in the city and the district of Montreal during the present season. There were comparatively few capable men unemployed. Those willing and able to work could easily obtain it. The wages averaged about $1.00 to $1.50 per day, according to capacity. Very few of those for whom I obtained situations came back on my hands.

THE LEARNED AND MECHANICAL BRANCHES.

The government discourages the immigration of the learned professions, such as barristers, doctors, college professors, school teachers, etc., unless they come here to fill engagements previously procured for them. The foregoing remarks would also apply to the skilled mechanical class of workmen. The reason being that the local supply of both the learned and mechanical branches are quite sufficient for the demand.

THE LABOUR MARKET.

It is satisfactory to be able to state that the congested condition of the labour market which prevailed last year has this year disappeared. This is proved by the fact that I have no unemployed immigrants on my hands, and that work was found for almost all applicants.

The government immigration agents in the old country have evidently used every endeavour to promote a desirable class of emigration to the Dominion, and that they have been successful in their efforts is shown by the appearance of the emigrants who have come to Canada this year.

LABOUR BUREAU.

A labour bureau has been established in this city. It is under the auspices of the city council and the trades and labour council, and charges no fees for securing work for applicants. The manager is Mr. S. Prescott, who appears to be a painstaking and efficient officer.

JUVENILE EMIGRATION.

I am pleased to say that the juvenile immigrants arriving here during 1895 were a desirable class.

These children have to pass a satisfactory medical examination, showing that they are physically and mentally healthy. The majority of them went to the homes established for them in Ontario and Manitoba; the remainder were consigned to the branch home of the Salford Catholic Protection and Rescue Society, 11 St. Thomas Street, this city. Mr. A. Robert and Mr. E. Marquette, both of the city, have also had several children consigned to them.

These children are placed with respectable farmers and private families, the younger children for adoption, the older ones to receive wages suitable to their capacity and employment

FRENCH AND BELGIANS.

The number of French and Belgians who arrived during the year was about the same as the preceding year. The large majority of these people were bound for Manitoba and the North-west Territories. Of the remainder, some went to the lake St. John district of Quebec, whilst others hired out among the farmers of this district. They were principally agriculturists and suitable, thrifty people, having more or less means of their own, the greater number coming by way of New York and on to Montreal, en route to their destinations. Mr. A. Bodard, the Canadian Government French and Belgian immigration agent in France, having given them my address, we carefully looked after their interests whilst here, giving them the necessary information as to the best and cheapest route to reach their destinations.

THE CHINESE COLONY.

The Chinese population of the city of Montreal is estimated at about 250, in which number are included three females.

The Chinamen are employed chiefly at the laundry business. There are, however, a few merchants and mechanics among them, the latter being patronized solely by their own compatriots.

GOVERNMENT PAMPHLETS.

We have distributed among the immigrants of the year a large number of the government pamphlets and other literature issued by the department. Moreover, these pamphlets are delivered to parties applying at the office gratis, and mailed to persons abroad who make application for them by letter.

THE ANDREWS HOME.

The Andrews Home for the Church of England immigrants was opened in May last. It is situated at 46 Belmont Park in this city; is centrally located, being in proximity to the principal railway stations, and admirably adapted to the purpose for which it was intended. There is accommodation for about one hundred persons, with separate apartments for men and women. The charges are $2.50 per week for board and lodging, or 15 cents per meal. The Reverend J. Frederick Renaud and his assistants do everything in their power to promote the interests of the Church of England immigrants who go to that institution.

THE CHARITABLE SOCIETIES.

The immigration of the year has not been as large as anticipated, yet I think the country is compensated for the reduced numbers by the improved class of the new arrivals.

In compliance with your instructions requesting that I ascertain whether the immigrants of the present year were burthensome to the charitable and benevolent societies of Montreal, I have had interviews with the officials of the various societies, the result of which I beg to report as follows:

1. Mr. Joseph Richards, first vice president of the St. George's Society, stated in effect that the immigrants with whom the society had to deal this year were of a a good class, and appeared to be an intelligent, industrious, and self-reliant lot of people. The amount of money expended in immigration work was considerably less this year than last year. There was a decrease in the number of immigrants admitted into the St. George's Home.

2. Mr. D. Campbell, manager of the St. Andrew's Society Home, said, in effect, that as regards the class of Scotch immigrants of 1895, with whom he had relations in his official capacity, they were really a fine lot of healthy, robust, and respectable people, and a desirable class for this country. There were fewer applications on the part of immigrants for admission into the Society's Home this year than for the like period of last year, the majority of those admitted remaining only a day or two, after which they resumed their journey westward to their destinations.

3. Mr. B. Campbell, chairman of the Immigration Committee of the St. Patrick's Society, being asked to state his opinion on the subject, said:

"I think the immigrants of the year 1895 up to date, 31st October, with whom, our society had to do, were a superior class of people, and just the sort required here. They gave the society little or no trouble, apart from that of procuring work for some of them, who simply wanted a fresh start to work, which, when given them, we see or hear no more of them—they manage to get along all right afterwards.

"The amount of money expended in the work of aid to immigrants during the present year was about the same as the preceding year. Railway tickets were purchased for a few going to relations and friends in the west."

4. Mr. Moses Parker, president of the Irish Protestant Benevolent Society, said that only a few immigrants so far this year had applied to the society's officers for financial assistance, and that only a small sum had been necessary to meet their requirements.

5. Mr. McMillan, superintendent of the Protestant House of Industry and Refuge, stated:

"We have had little to do with immigrants this year. There were only a few of those people who sought shelter and board at the House; these stayed with us for a brief period only. They seemed to be a healthy, vigorous lot of people. I think this a fair test of the good quality of the immigrants of the year. There was a family of foreigners, however, admitted and remained with us a week or so, when they left for the west. The amount of money expended in aiding immigrants was insignificant."

THE WOMEN'S PROTECTIVE IMMIGRATION SOCIETY OF MONTREAL.

It affords me pleasure to say that the society has done good work during the year 1895. The respectable immigrants of all creeds and nationalities going to the Home managed by the society, which is situated at 84 Osborne Street, are admitted and receive comfortable treatment during their temporary stay there. They get board and lodging free of charge for the first 24 hours, after that they are charged ten shillings each per week, and have suitable situations provided for them by the officials when leaving the Home.

The matron, who has had several years of practical experience in immigration work, when notified so to do, meets the new arrivals coming in by boat or rail as the case may be.

The board of management deserve high praise for their devotion of valuable time in promoting the noble work of the society.

APPENDED REPORTS.

I inclose herewith for your information reports from Mr. E. Marquette, provincial government agent; Mr. A. B. Owen, Dr. Barnardo's Canadian agent; Mr. Charles Helm, interpreter and travelling agent, Allan Line; Mr. Robert A. Dawson, inter

preter and travelling agent, Dominion line; the matron of the Catholic Protection and Rescue Society's Home, and the hon. secretary-treasurer of the Women's Protective Immigration Society.

JUVENILE IMMIGRATION INSPECTION.

In obedience to a departmental letter of instruction, Mr. A. Regimbal, of my staff, paid an official visit of inspection to upwards of one hundred juvenile immigrants, brought out in 1894 to Canada by the various charitable societies in the mother country, and his report on this work has been duly transmitted to you.

CORRESPONDENCE.

There was an increase in the correspondence of this office as compared with the same period of last year. Many letters had been received from intending immigrants in different parts of the world asking for information regarding the Government free grant lands in Manitoba, the North-west Territories and British Columbia; the prospect for employment in the various trades and callings; the rates of wages; steamship and railway fares, etc. Answers, giving full and reliable information, were duly sent to my correspondents, and I have utilized the pamphlets and other immigration literature supplied by your department.

I have the honour to be, sir,
Your obedient servant,

JOHN HOOLAHAN,
Dominion Government Agent.

STATEMENT A.

STATEMENT of Immigrant Arrivals and Departures at Montreal Immigration Agency for 10 months ending 31st October, 1895.

MONTHS.	Arrivals via United States.	SEXES.			DECLARED DESTINATIONS.					NATIONALITIES REMAINING IN CANADA.							OCCUPATIONS REMAINING IN CANADA.							For Canada not reported elsewhere.
		Males.	Females.	Children under 12.	Quebec.	Ontario.	Manitoba.	N.W. Territories.	British Columbia.	English.	Irish.	Scotch.	German.	Scandinavians.	French and Belgians.	Other Countries.	Farmers.	Farm Labourers.	General Labourers.	Mechanics.	Clerks and Traders.	Female Domestics.	Not Classified.	
January	171	89	42	40	23	47	84	7	10	91	20	10	6	15	6	23	16	29	23	14	7	12	70	171
February	156	79	36	41	18	42	73	12	11	81	20	12	9	14	4	16	12	22	22	17	6	10	67	156
March	301	158	72	71	39	89	148	15	10	160	31	19	17	26	10	38	40	50	33	24	11	18	125	301
April	450	232	52	166	42	247	105	35	21	332	25	15	11	19	25	23	28	39	49	20	8	15	291	450
May	268	130	70	68	30	46	132	40	20	134	31	19	10	18	27	29	23	43	37	18	9	13	125	268
June	288	153	72	63	45	65	120	36	22	154	27	19	13	22	27	26	30	50	38	25	10	16	119	288
July	287	156	64	67	39	48	128	44	28	133	30	24	13	21	39	27	31	40	52	24	9	14	117	287
August	301	157	65	79	52	52	130	44	23	139	26	22	19	25	37	33	24	44	59	20	10	15	129	301
September	274	146	62	66	48	49	124	32	21	135	20	23	16	20	29	31	23	33	64	16	10	22	106	274
October	229	122	50	57	41	57	90	22	19	109	25	18	10	16	27	24	20	34	47	14	9	14	91	229
Totals	2725	1422	585	718	377	742	1134	287	185	1468	255	181	124	196	231	270	247	384	424	192	89	149	1240	2725

JOHN HOOLAHAN,
Dominion Immigration Agent.

DOMINION IMMIGRATION OFFICE,
MONTREAL, 31st October, 1895

STATEMENT B.—Showing the Number of Children received at this Agency, whom in charge of, and destination, for the ten months ending 31st October, 1895.

Date.	Name of person in charge.	Number of Children.	Destination.	By whom sent.
Feb. 19..	Mr. Drummond.....	42	Knowlton.....	Mrs. Birt.
March 19..	Mrs. Dunn	30	Niagara.....	Miss Rye.
April 2..	Mr. E. A. Struthers.....	31	Russell, Manitoba.....	Dr. Barnardo.
do 3..	Mr. A. B. Owen	133	Toronto	do
do 8 ..	Rev. R. Wallace... ...	101	Belleville.....	Rev. R. Wallace.
do 8..	Mr. Frank Hill.....	40	Hamilton.....	Dr. Stephenson.
do 11..	Messrs. Burgess and Thompson.	138	Brockville.....	Mr. Quarrier.
do 15..	Mr. N. T. Lee	13	Grenfell, Manitoba.....	Rev. R. Wallace.
do 18..	Mr. Mark King.....	58	Belleville.....	do
do 30..	Mr. Drummond	56	Knowlton.....	Mrs. Birt.
May 5..	Mr. Feegan.....	103	Toronto.....	Mrs. Feegan.
do 12..	Mr. D. Ross.....	16	Winnipeg.....	Boys' Home, London.
do 12..	Miss McPherson.....	53	Stratford.....	Miss McPherson.
do 19..	Miss Taylor.....	33	Belleville.....	Rev. R. Wallace.
do 26..	Miss Yates.	55	Montreal.....	Catholic Protective and Rescue Society.
June 9..	Mr. Corrigan	40	do	do
do 10..	Rev. Lord Douglas.....	9	Ottawa.....	Rev. Lord Douglas.
do 13..	Mr. Thompson.....	124	Brockville.....	Mr. Quarrier.
do 16..	Mrs. & Miss Birt..	36	Knowlton	Mrs. Birt.
do 26..	Rev. R. Wallace.....	41	Belleville	Rev. R. Wallace.
do 26..	Rev. Thos. Seddon.. ..	40	Montreal	Rev. Thos. Seddon.
July 7..	Mr. A. B. Owen.....	150	Toronto.....	Dr. Barnardo.
do 7..	Mr. E. A. Struthers.....	52	Russell, Manitoba.....	do
Aug. 4..	Miss Soffa	44	Niagara.....	Miss Rye.
Sept. 15..	Mrs. A. B. Owen.....	299	Toronto	Dr. Barnardo.
do 29..	Miss Yates.....	22	Montreal.....	Catholic Protective and Rescue Society.
		1,759		

JOHN HOOLAHAN,
Dominion Government Immigration Agent.

MONTREAL AGENCY,
31st October, 1895.

STATEMENT C.—Annual report of Immigrants wanted at the Montreal Agency from January 1st to October 31st, 1895.

——	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	Total.	Remarks.
Blacksmiths	.....	2	3	5	7	3	2	3	2	1	28	Local supply sufficient.
Butchers	1	1	2	4	2	4	5	2	1	2	24	do do
Bricklayers	.....	.....	.....	7	12	7	3	4	2	3	38	do do
Bakers	.....	.....	.....	2	3	2	1	2	3	1	14	do do
Carpenters and joiners	1	3	9	10	20	14	21	6	4	2	90	Demand limited.
Cabinet makers	.....	2	1	2	1	2	3	2	.....	1	14	Local supply sufficient.
Clerks	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	No demand.
Express drivers	.....	2	4	6	9	5	3	2	1	1	33	Local supply sufficient.
Female cooks	10	12	14	16	14	17	13	10	12	10	128	Large demand.
General servants	7	21	29	33	30	32	29	20	17	13	231	do
House-maids	5	8	9	12	14	12	15	10	7	7	99	do
Farm hands, male	3	7	10	15	27	24	36	22	9	8	161	Good demand in season.
Farm hands, female	2	3	5	7	10	7	10	9	6	4	63	do do
Common labourers	5	10	.....	10	20	16	12	7	5	6	91	Fair demand in season.
Night-watchmen	.....	.....	.....	2	3	2	3	2	1	1	14	Local supply sufficient.
Storemen	1	.....	.....	3	2	3	1	1	2	1	14	do do
Tinsmiths and plumbers	.....	2	3	4	3	2	3	1	.....	.....	18	do do
Steam-fitters	.....	.....	.....	1	2	3	2	1	.....	.....	9	do do
Painters	.....	.....	.....	6	8	6	27	3	2	.....	52	do do
Printers	.....	.....	.....	1	3	2	1	.....	.....	.....	7	do do
Waiters	1	2	4	3	5	3	4	3	1	2	28	Occasionally asked for.
Boys, messengers	1	3	4	6	4	5	3	4	2	1	33	Local supply sufficient.
do office	.....	.....	.....	2	2	3	1	2	1	.....	11	do do
do bell	2	2	3	4	6	7	5	4	2	1	36	do do
do care of horses	3	5	7	10	15	12	15	10	6	3	86	Fair demand in season.

JOHN HOOLAHAN,
Dominion Government Immigration Agent.

DOMINION GOVERNMENT IMMIGRATION AGENCY,
MONTREAL, 31st October, 1895.

STATEMENT D.—List of Retail Prices of the Ordinary Articles of Food and Raiment required by the Working Classes at Montreal Agency.

Provisions.	Prices.		Clothing, &c.	Prices.	
	From	To		From	To
	$ cts.	$ cts.		$ cts.	$ cts.
Bacon, per lb	0 12	0 15	Coats, under, tweed	4 00	6 50
Bread, best white, 13c. 4 lbs.,			do over do	8 00	12 00
brown, 6 lbs		0 13	Trousers, tweed	2 00	3 50
Butter, salt	0 18	0 25	Vests do	1 00	1 50
do fresh	0 20	0 30	Shirts, flannel	0 50	1 00
Beef, 7c. to 12c., mutton, 10c. to 12c.			do cotton	0 50	0 75
veal, 10c., pork	0 10	0 12	do under, "wove"	0 40	0 75
Beer, per quart		0 10	Drawers, woollen, "wove"	0 40	0 75
Candles		0 14	Hats, felt	1 0	1 50
Cheese		0 13	Socks, worsted	0 20	0 35
Coffee	0 20	0 40	do cotton	0 15	0 25
Corn meal, per 100 lbs		2 50	Blankets	2 00	4 00
Eggs	0 12	0 25	Rugs	0 75	1 50
Flour, per barrel, 1st quality	4 00	4 50	Flannel	0 20	0 35
do do 2nd do	3 50	3 75	Cotton shirting	0 08	0 10
do buckwheat, per 100 lbs	2 00	2 25	Sheeting	0 08	0 15
Fish, dry or green cod, per cwt	2 50	2 75	Canadian cloth	0 40	0 75
Firewood, per cord	5 00	6 00	Shoes	1 00	2 00
Ham, per lb	0 12	0 15	Boots	1 00	2 00
do shoulders, per lb	0 08	0 10	India rubber overshoes, men's	0 75	1 25
Herrings, per barrel	4 00	4 25	do do women's	0 75	1 00
Mustard, per lb	0 20	0 25			
Milk, per quart	0 05	0 08			
Oatmeal, per 100 lbs	2 00	2 50			
Pepper, per lb	0 15	0 20			
Potatoes, per bushel	0 30	0 45			
Rice, per lb		0 04			
Soap, yellow, per lb	0 03	0 08			
Sugar, brown	0 03½	0 04			
Salt, per lb		0 01			
Tea, black	0 25	0 40			
do green	0 30	0 40			
Tobacco	0 30	0 50			
Coal, per ton	5 50	6 50			
Coal oil, per gallon	0 18	0 20			

JOHN HOOLAHAN,
Dominion Immigration Agent.

DOMINION IMMIGRATION AGENCY,
MONTREAL, 31st October, 1895.

Department of the Interior.

LETTER FROM MR. E. MARQUETTE, PROVINCIAL GOVERNMENT IMMIGRATION AGENT.

(Appended to Report of Montreal Agent.)

MONTREAL, 12th November, 1895.

MY DEAR MR. HOOLAHAN,—With much pleasure I write you a few lines concerning immigration in this province during the season just closing.

There has been a perceptible decrease in the number of people arriving, compared with former years, but at the same time there has been a great improvement in the class of people. I have had no trouble in placing every one who came to my care, and am very well satisfied with the work done this year. I had more applications from the Eastern Townships for farm help than I could fill all through the season.

The East End Emigration Fund and the Self Help Emigration Society of London, England, sent a large number of souls, but fewer than in former years. The majority of these people were placed in the country. Lately, in company with Major Gretton, Secretary of the East End Emigration Fund, I visited many of these people in the Eastern Townships, and I am happy to say I found all of them doing very well considering the short time they had been in this country.

I am yet taking short trips into the country whenever I can to find likely places for the people I expect to receive early next season.

Among other immigrants the Self Help Emigration Society sent one hundred young men to learn farming. I have lately written to each of these young men asking for information concerning their welfare. I have already received twenty-eight answers, all of them very satisfactory, and expect soon to hear from the others.

On the whole I think this province received her share of the very desirable class of people who emigrated to Canada this year.

With kind regards,

Yours sincerely,

E. MARQUETTE.

JNO. HOOLAHAN, Esq.

DR. BARNARDO'S HOMES.

LETTER FROM MR. ALFRED B. OWEN.

(Appended to Agent Hoolahan's Report.)

214, FARLEY AVENUE, TORONTO.

JOHN HOOLAHAN, Esq.,
Dominion Immigration Agent,
Montreal.

SIR,—Availing myself of your kind offer to embody again a brief account of Dr. Barnardo's immigration work for a portion of the past season in your annual report to the Minister of the Interior, I have much satisfaction in stating for the information of the minister that the present year has in no respect fallen behind any of its predecessors in the activity and success of Dr. Barnardo's operations. As I write we have still another large detachment of young people to receive from the English institutions, but, exclusive of these, a total of 662 have been sent out since the beginning of the year. This number included 156 girls and 506 boys. They crossed in three detachments leaving England on the 11st March, 27th June, and 5th September, respectively, in each case travelling by the mail steamers of the Allan Line. Previous to leaving England each child had passed through the usual period of careful practical training, and in many cases the young immigrants had been for several years under the charge of the institu-

tions. The "boarding out" system has of late years been very largely and successfully adopted by Dr. Barnardo, and a considerable number of the children sent out during the present year had been provided for in this manner. They had been brought up in English country households, had attended village schools, and had become thoroughly familiar with country life, with the result that they are the more ready to adapt themselves to the conditions of their life in Canada, and are, to that extent, more useful and valuable to their employers. The health and physique of the children sent out during the present year will compare favourably with those of any previous year. On this point we have had most gratifying and complimentary testimony from people who have travelled on the same ships with our parties and have observed them closely, from medical men through whose hands they have passed, and many others. One boy suffering from defective vision was, owing to an unfortunate oversight, included in one of our parties, but, his condition being discovered during the voyage, he was returned to England on the same ship, and, as far as such a statement can be made with accuracy, we feel justified in asserting that no child has been added to the population of the Dominion during the present year under Dr. Barnardo's auspices who is otherwise than physically healthy and mentally sound. The demand for the young people has shown itself still on the increase, and, as usual, at each of our distributing agencies many applications have been left unfilled. To the best of our judgment and ability the houses in which children have been placed have been carefully selected, and letters received from children themselves and information which has reached us from other sources show that, with exceedingly few exceptions, they have settled down happily into their new homes.

Our inspectors have been actively engaged during the year. A staff of four people, two gentlemen and two ladies, are permanently and exclusively engaged in visiting the children, each visit being the subject of a full and detailed report. It is very gratifying to be able to state that although these visits are invariably surprise visits and every facility is given the children to lodge any complaint or grievance if they have any reason to do so, there have been scarcely any cases brought to our notice of harshness or ill usage in any form, and on looking over the reports we find in the great majority of cases that the young people are happy and comfortable, making steady progress and giving every reasonable satisfaction to their employers.

Our correspondence directly with our young charges or relating to their affairs has been immense and increasing, and we have recently embarked on a new enterprise in the shape of a monthly magazine of ten pages, circulating exclusively among those brought out under Dr. Barnardo's auspices, and devoted to their interests. So far the new departure has met with a most favourable and encouraging reception, and we look forward to its being a valuable means of keeping our young people in touch with us, and in stimulating them to increased effort and perseverance in raising their position in life. The reports of an abundant harvest in Manitoba and the North-west Territories has led to a considerable movement in that direction among our older boys and young men who have been living for some years in the province of Ontario. A good many availed themselves of the cheap harvest excursion, and we have since received numerous inquiries as to the prospects of settlement from others who are proposing to migrate next spring. We always give the fullest encouragement to such projects, believing that young men of good health and industrious habits who have served their apprenticeship in Canadian farming can no where find better prospects for establishing themselves in life.

I cannot conclude without expressing our grateful appreciation of the unfailing courtesy and kindness we have received at the hands of the officials and representatives of the Immigration Department. We owe much to the kind helpfulness and attention that is always forthcoming in Liverpool, Quebec, Halifax or Montreal, and I am glad to have this opportunity of offering our sincere and hearty thanks to all the officers of the department to whom we are thus indebted.

I have the honour to be, sir,

Your obedient servant,

ALFRED B. OWEN.

Department of the Interior.

Letter from Mr. Charles Helms.

(Appended to Mr. Hoolahan's Report.)

Quebec, 31st October, 1895.

To John Hoolahan, Esq.,
Dominion Immigration Agent,
Montreal.

Sir,—In answer to your inquiry of information as to the class of immigrant settlers for Canada brought out by the Allan Line of steamships, during the ten months ending the 31st October, 1895, I beg to say that I have met those immigrants upon arrival, and accompanied them on the railway trains of both the Grand Trunk and Canadian Pacific from Quebec in summer, and Halifax in winter, thence westward to Sarnia, per the Grand Trunk, or North Bay, by Canadian Pacific Railway. That they were a good class of healthy, intelligent, thrifty people, I am able to testify from the fact that there was no sickness among them; that they had means and paid all necessary expenses of travel and provisions for the trip, and had a surplus wherewith to take house keeping once more in their new home, or to maintain them whilst seeking employment. There were a large number of Germans, Swedes and Norwegians among them. These went to Manitoba and the North-west, where they intended to take up and work the land. Compared with the same period last year, I think the number of immigrant arrivals were about the same.

The Grand Trunk and Canadian Pacific Railway Companies have performed the work of transportation of the immigrants referred to in a praiseworthy manner.

I have the honour to be, sir,
Your obedient servant,
CHARLES HELMS,
Interpreter Allan Line Steamships.

Letter from Mr. Robert A. Dawson.

(Appended to Agent Hoolahan's Report.)

To John Hoolahan, Esq.,
Dominion Immigration Agent,
Montreal.

Quebec, 31st October, 1895.

Sir,—In compliance with your request as to the class of immigrants (settlers for Canada only brought out by the Dominion Line of steamships in the ten months ending the 31st October, 1895), I wish to say that in my opinion the immigrants referred to were a good class, being apparently a healthy, thrifty lot of people.

You are aware that I meet the immigrant passengers of the Dominion Line of steamships at the port of landing, and that I accompany them as guardian on the railway trains from Quebec or Halifax, as the case may be, to points in Quebec province and intermediate stations in Western Ontario.

That whilst travelling with them I ascertain their destinations and other particulars relative to their intended future mode of living. I give them the best possible advice and instructions under the circumstances. I thus become familiar with them and their projects, and am therefore in a position to form an estimate as to whether they are a desirable or undesirable class of people for Canada.

The lists of the immigrants, arrivals, destinations, etc., have been regularly furnished you. It is therefore unnecessary to give statistics of such arrivals in this report.

I may add in conclusion that the transportation of the immigrants by rail was satisfactory.

I am sir, your obedient servant,
ROBERT A. DAWSON,
Interpreter for Dominion Line Steamship Company.

REPORT OF THE CATHOLIC PROTECTION AND RESCUE SOCIETY HOME.

11, St. Thomas Street, Montreal.

(*Appended to Agent Hoolahan's Report.*)

To John Hoolahan, Esq.,
Dominion Immigration Agent,
Montreal.

Sir,—In placing before you my first report, I beg to remark that, although we are young, not yet two years old, our work, however, gives us much satisfaction.

Last September, two years ago, I had the pleasure of meeting Rev. Father O'Callaghan of Manchester, England. He was looking after some of the young immigrant children sent out by the Salford Society in former years, and, hearing that we had befriended some of those little ones, called on me to discuss the possibility of getting myself, or some one taking an interest in the children, to start a small home to receive them on arrival in Canada, or whenever they would be out of a place. In the meantime Rev. F. O'Callaghan had obtained from the members of the St. Vincent de Paul Society of St. Ann's parish a promise to take an interest in the work, and a committee was formed to this effect. The spiritual director of the society a few months before had already discussed with Rev. F. Bossall, then visitor for Salford, the necessity of a home in Montreal. Rev. F. O'Callaghan, and his companion Mr. Smart, tried to settle with different homes in Montreal, but, all the charitable institutions in the city having more than enough on hand, they succeeded with none. After due deliberation and with the advice and kind supervision of Rev. Father Godts, we have started a work which we hope will, in God's name, and in the cause of charity, bring forth good fruits.

We found a house to suit, in a retired street, for which we pay the sum of $20.00 a month, and to which an addition was made this year for a dormitory at our own cost of $300.00.

During the first month of 1894 we sheltered many boys in the city in boarding-houses, or elsewhere, the best we could. Rev. F. Godts was appointed agent and empowered to act for his lordship the Bishop of Salford and for the society in Liverpool; the home was opened on May, 1st, 1894, and in the month of June we received our first lot of boys. Although they came from Rev. Father St. John in London, we gave them shelter until we placed them, 17 in number, in good homes in the country from our application list. Our next lot, numbering 27, ranging in age from 7 to 15 years, arrived in Montreal July 3rd, in charge of Miss Yates, from Liverpool. On July the 9th we received 25 children in charge of Mr. Smart, of Salford. With a few exceptions they were placed as soonas we could send word of their arrival, as we never send a child until we are sure that the parties meet them at their arrival, and never give a child unless the party is well recommended by the parish priest, and a clear understanding that if the child does not suit, he or she will be sent back to the Home, first notifying us. On September 22nd we received another lot in charge of Miss Yates, from Liverpool, 27 boys and 25 girls, with two girls in charge, numbering in all 54, which were all placed in good homes to be adopted or to work, as we make a condition that no child can be had for adoption where there may be other children. When a child has reached the age of 12 or 13 they must receive wages according to their capacity and employment. We received in 1894 in all from England 123 children; besides we have had last year about 50, boys and girls, who have been out for several years, and as yet did not receive any wages, some of them having worked for three or four years for their board, although taking the place of men and women. This causes much trouble between the child and the employers. If we want those children to become useful to us, we must treat them in a kind and gentle way, as we would like our own to be used if placed in a like position. Therefore the society and the priest of the parish act as arbiters between employer and child, a cor-

respondence is kept up, and about new year all the children in the city were visited by gentlemen for the boys, and ladies for the girls. Reports are also received from the country.

No trouble has been spared in case of a child illused or not well placed. We travelled repeatedly to Ottawa and elsewhere, got a girl away from Bryson with the assistance of the government, and used the assistance of a justice of peace near St. Jerome, and got the protection of the law when required here in the city. During this present year, 1895, we have had by steamer "Numidian," from Liverpool, May 22nd, 55 children; from Salford, two weeks later, 41. Then again, September 29th, from Liverpool, 19; besides 2 girls in charge, 4 from Salford; altogether 121. This year we received and placed of those that were in Canada already 35 boys and 41 girls, making 76 who passed through the Home, giving altogether 197 sheltered and placed, with the exception of 5 small boys to be disposed of yet. As we have a whole list of applications on hand, boys and girls of the city have been helped to find situations. One disabled boy was taken back to England, 3 girls were placed in the Good Shepherd's and are doing well. Of nearly 3,000 children placed in Canada from Liverpool and Salford, there are at present in the Good Shepherd's, besides an idiot, one girl, whom a lady wants but we like her to stay a little; in the reformatory 3 boys, one of whom will soon go and two may be sent back to England.

As the societies in England are pleased with the work done, we except the number of immigrants to increase, and are promised a large number for 1896. If duly protected, we hope, with God's helping, the Catholic Protection and Rescue Society may succeed in its work.

Respectfully yours,

AGNES BRENNAN,
Matron.

REPORT OF THE WOMEN'S PROTECTIVE IMMIGRATION SOCIETY.

(*Appended to Agent Hoolahan's Report.*)

MONTREAL, 27th November, 1895.

To JOHN HOOLAHAN, Esq.,
Dominion Immigration Agent,
Montreal.

SIR,—In presenting their fourteenth annual report to the public, the Women's Protective Immigration Society are glad to state that in spite of opposition and other drawbacks their work has been carried on steadily and satisfactorily during the past year.

256 immigrants have passed through the Home during the season.

166 English, 26 Irish, 49 Scotch, 1 Welsh, 4 French, 5 Germans, 3 Swedes, 1 Russian, 1 Finlander.

165 Church of England, 4 Church of Ireland, 19 Roman Catholics, 33 Scotch Presbyterians, 6 Wesleyans, 15 Baptists, 2 Congregationalists, 2 Jewesses, 1 Quakeress.

74 immigrants of previous years returned to the Home.

These numbers include seven parties which were sent out through the United British Women's Immigration Association by the Hon. Mrs. Joyce, of St. John's Croft, Winchester; one party from Mrs. Foster of Bristol; also a party of 17 children in charge of 3 ladies from Mrs. Cameron's Industrial School, Maryhill, for St. John's, New Brunswick.

Of these immigrants 121 passed through the Home bound for Ontario and the western provinces. The majority received board and lodging free for 48 hours owing to their inability to proceed on their journey on Sunday.

The number of those whose names have been registered compares very favourably with that of the two previous years, and the government returns show that a large proportion of female emigrants who have entered Canada have availed themselves of the shelter of the Home.

A communication was received in July last from the Honourable Minister of the Interior informing the managers that the government found it neceesary to reduce all immigration expenses, and that therefore one half of the grant to the Women's Protective Immigration Society would be withdrawn. Hopes were, however, held out that this reduction would only be for the current year, and every effort is being made by the friends of the society to ensure the restoration of the grant to the original sum. The reduced income must mean a considerable curtailment of the work, which would be a serious loss to the cause of immigration in depriving future female immigrants of the protection and shelter on which they have so long depended.

The Reverend J. Patterson, the Presbyterian city missionary, has been most faithful in visiting the Scotch immigrants on their arrival, and in continuing his care of them after they leave the Home.

The officials of the Allan and Dominion Steamship Lines have been unremitting in their kind assistance to the secretary and matron on the arrival of steamers.

Thanks are also due to the officials of the railway companies who have done all in their power to lessen the anxiety and difficulties of sending young women on to their destinations.

The managers wish specially to acknowledge gratefully the friendly interest taken in the society by yourself and Mr. Marquette, the Provincial Immigration agent.

The committee also desire to thank Dr. Kirpatrick for his unfailing attention to the inmates of the Home.

The whole respectfully submitted.

EVA VOSBURGH,
Hon. Secretary-Treasurer.

No. 5.

REPORT OF MR. A. L. POMEROY.

(TRAVELLING IMMIGRATION AGENT.)

COMPTON, P.Q., 2nd November, 1895.

A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I submit for your approval my report, and beg to state that, in accordance with instructions, I met the mail steamers and other ships bringing immigrants to Quebec, from 1st June until 31st October. My duties were looking after the general comfort and welfare of the immigrants, giving them all information possible, and assisting in placing those remaining in the province of Quebec. The immigrants that have arrived this season have been of a good class.

I have the honour to be, sir,
Your obedient servant,

A. L. POMEROY,
Travelling Immigration Agent.

No. 6.

REPORT OF MR C. A. L. AKERLINDH.

(SCANDINAVIAN OFFICER)

DEPARTMENT OF THE INTERIOR,
OTTAWA, 31st October, 1895.

To A. M. BURGESS, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit my report for the season just ended.

The class of this year's immigration has been subject matter for congratulation, for although there has been a decrease in number the majority of the newcomers were good settlers.

There arrived in this district during the past season quite a number of Scandinavians, whom I have been able to dispose of in a very satisfactory way. They are, as usual, a very desirable element, and although they have not as a rule brought much wealth with them, they are a most industrious class of people, who learn the English language quickly, adapt themselves to the laws and institutions of the country, and become useful citizens. It is a noticeable and pleasing fact that many of these people who were inclined lately to stay about the city have seen the advantage of taking up land to build up homes for themselves. Several of the Scandinavians who came to this district during this and last season have this summer joined their countrymen at the colonies lately founded near Warren, Bruce Mines and Echo Bay, in Ontario, while others went on to Manitoba and the North-west Territories.

During the season I have received quite a number of good letters from successful Scandinavian settlers, which I have been able to get inserted in the Scandinavian papers published in Canada and subscribed for by the department for circulation in the mother countries, in addition to sending copies to Mr. Swanson, agent of the department for the Eastern States, and to certain other quarters where I considered they would do most good.

Of the supply of Danish-Norwegian circulars printed in October, 1894, I have distributed during this season the balance remaining from that year, about 7,000 copies, and of the Swedish edition remaining from the same year, the whole balance, about 1,500 copies. In addition to these, about 2,500 copies of the "Handy Interpreter," some 2,000 copies of the Swedish hand book, and about the same number of the Danish-Norwegian pamphlets, were distributed by me; also some 2,500 circulars printed for the department and intended for the United States, as well as quite a supply of the Canadian Pacific Railway Company's Scandinavian folders, and weekly a considerable number of the *Scandinavian Canadian* of Winnipeg, and the *Danebrog* of Ottawa, both papers materially aiding me in my labours in the interest of immigration.

Of personal callers for information at the office I have had during the busiest season as many as 20 to 30 people per day of various nationalities, all of whom I have endeavoured to satisfactorily provide with the latest, most complete and correct information.

The various other duties in connection with my office have received my best attention.

During the early part of the year, in obedience to instructions received from the department, I visited a large number of workhouse children sent out by charitable institutions in England, Ireland and Scotland, who had been placed out in the surrounding districts, viz.:—In the city of Ottawa, counties of Carleton, Renfrew, Lanark, Russell, Prescott and Nippissing and Parry Sound districts, in the province of Ontario,

and the counties of Pontiac and Ottawa in the province of Quebec. I can fairly state that with a very few exceptions great care was displayed in selecting and locating these children, as I found nearly all of them in very comfortable homes, where they will grow up to become useful members of the community.

During my tour of inspection I noticed that the country is steadily progressing; there have been a considerable number of both brick and stone houses of a superior quality, and excellent wooden barns and out-houses constructed in the several counties since I upon former occasions visited the same districts; and new villages have sprung up along the railways, whilst the older towns and villages are improving rapidly, in fact the country appears fairly prosperous wherever I visited.

During the season the demand for agricultural labourers was not quite as large as in previous years, nor were the wages as high, the chief cause for this being the large number of men who during the winter and early part of the season came into these parts from the United States on account of the depressed state of affairs there. Many of these, who for months had been without employment in the States, offered themselves upon arrival here at very low wages, some even for their board and lodging alone, being only too happy to obtain employment on any terms. The applications made to me for good experienced agricultural hands, the above notwithstanding, were, however, fully sufficient to enable me to provide the new arrivals with suitable and profitable employment. The outlook for the coming year would indicate an active demand for skilled agricultural labourers, principally single men.

The labour market for unskilled labour has not, I regret to say, been very active this season. The demand for this class of help is apparently growing less each year, and I could not conscientiously advise any large numbers of this class to come to these parts.

The arrivals of female servants were quite inadequate to satisfy the demand. Strong, healthy young girls, trained in general household duties, and arriving here at any time, will receive a hearty welcome and be assured of immediate and remunerative employment. There is room in the country for a large number of intelligent, well trained girls, of good character, willing to accept of domestic service and anxious to earn an honest living.

Mechanics as a rule should not come here in large numbers, and there is no demand whatever for professional men and clerks; therefore they should receive no encouragement to emigrate to these parts. It was with the greatest difficulty I succeeded in placing a few young men this year as clerks; others of this class were obliged to accept any light job which presented itself, such as grooms, messengers, hotel-waiters etc, etc.

I take great pleasure in stating that the general health of the immigrants coming under my care was exceptionally good, there being only a couple of cases of sickness requiring medical attendance or hospital accommodation.

Trusting that my endeavours to perform all the duties devolving upon me to the satisfaction of the department and in the best interests of immigration will meet with your approval.

I have the honour to be, sir,
Your obedient servant.

ALFRED AKERLINDH,
Government Immigration Officer.

No. 7.

EXTRACT FROM REPORT OF MR. C. F. HERBERT, FORMERLY TRAVELLING IMMIGRATION OFFICER AT NORTH BAY, ONTARIO.

"While performing my duties as Travelling Immigration Agent at North Bay, Ontario, you deemed it necessary to utilize my services during the slack immigration months of February, March and April, as inspector of 71 pauper children, who had been sent out to Canada by different Philanthropic Societies in England; therefore on the 28th of January last I received instructions to proceed without delay and personally inspect the said 71 children (whose names, addresses and printed forms to fill in you furnished me with) and forward to the department daily a report of each child inspected, particularly requesting me to make careful inquiries and give a full description as to the name and age of the child and agency from whence it came, also the name of the party bringing them out, also the name, full address and occupation of the employer, general character of the home the child is placed in, and as to whether the child appears to be in any way over worked, or if the work is suitable for the strength and age of the child, the health and whether the child shows any symptoms of hereditary disease, and also if the child attends church, or Sunday school, the general character and terms on which the child is kept, date of inspection, etc., etc., etc. Therefore, in accordance with your instructions, I left North Bay on the 2nd of February, and commenced the inspection of the said children, who were placed out in homes in the counties of Halton, Wellington, Grey, Waterloo, Wenthworth, Lincoln, and Niagara, Welland, Monk, Haldimand, Brant, Norfolk, Oxford, Huron, Middlesex, Elgin, Bothwell, Kent and Bruce. Nearly all of the children were brought out by the agents of Dr. Barnardo, Miss Rye, W. J. Pady, and the Marchmont Home, and their ages ranged from 8 to 16 years, with the exception of four being under the age of 8 years.

"I am pleased to state that I found 68 out of the 71 children in a most healthy condition, and fully up to the physical standard of their respective ages. Measurements of their heads showed them to be of the ordinary size, and evenly, well-shaped. Heights and measurements of the boys' chests showed them to be fully up to the standard. I also found their heads well covered with hair, their mouths full of teeth, and finger nails well formed, and in most cases their skin clear and moist, and showing no apparent symptoms of hereditary disease. I was most pleasingly surprised to find such a bright intelligent and good dispositioned lot of children, and the characters given them by their respective employers were very satisfactory. I also found the children well clothed, and almost all of them I found in far better homes than my own children have. All of the children attended church, or Sunday school, weather permitting, and the younger ones attended day school, part or full days.

"Proper and reasonable arrangements were made for the keeping of each child until reaching the age of 18 years, the elder ones receiving wages according to their worth. Each child seemed anxious to tell me in private of the good home they had, and the kind treatment they were receiving. Therefore, much credit is certainly due the Philanthropic Societies in England for selecting such good subjects to become Canadian citizens, and I cannot speak too highly of the precautions which appear to have been taken by the managers of the above mentioned homes in Ontario, for selecting (out of so many applications received) such comfortable homes and kind employers for the said 71 children, and the employers all seemed pleased that the Government had sent an inspector to learn the kind of treatment the children were receiving.

"I found that Miss Rye, at the Niagara-on-the-Lake home, exercised the height of precaution in the placing out of her girls, as out of the very many applications received for them only a few were complied with. Miss Rye assured me that she had not

experienced much trouble with her girls, which was owing to two reasons : first, that precautions were taken in England to send out only healthy, strong, and good dispositioned girls ; and secondly, that she takes great precaution, not only to secure comfortable homes, but she must be perfectly satisfied that the mistress of the home the girl is going to possesses a kind disposition and a willingness to impart instruction. Such precautions, Miss Rye states, usually insure satisfactory results and saves further trouble. Miss Rye makes a call, or corresponds with each girl once or twice during the year, and should any change be required, through any fault of the girl or her mistress, she insists upon the girl being sent back to the Niagara-on-the-Lake Home."

No. 8.

REPORT OF MR. J. M. McGOVERN.

(Travelling Immigration Agent.)

Port Arthur, 31st October, 1895.

To H. H. Smith, Esq.,
Commissioner of Dominion Lands.
Winnipeg, Man.

Sir,—I have the honour to submit the following report of work performed, with some particulars concerning immigration to the western provinces, and other matters, for the ten months ending October 31st, 1895.

INSPECTION OF IMMIGRANT CHILDREN.

In the early part of the year I received instructions to make an inspection of immigrant children who had been placed out by the Barnardo and other Homes in different parts of Ontario. Accompanying the letter of instructions was a list of seventy odd children, showing where and with whom they had been placed. I left here in the early part of February to commence the work, which necessitated a great deal of travelling by train and livery teams and occupied two months.

METHOD OF INSPECTION, REPORT AND SUGGESTIONS.

A careful statement was obtained from each child as well as from the employer or guardian, and a report of the principal facts of each case forwarded to the department. When the inspection was completed I made a general report of the work, also some suggestions in connection with this class of immigrants and the work of the Homes, which were favourably received by the department.

USUAL DUTIES, TRAVELLING WITH IMMIGRANTS.

In the month of April I returned to Port Arthur to resume my usual duties. It having been decided that it would be advisable for me to travel as much as possible with immigrant passengers en route to the western provinces, I at once began making the trips between Port Arthur and Schreiber, which necessitated leaving here at 6 a.m. and returning at 10 p. m. I have made these trips three and four times per week, meeting at Schreiber all trains that carried any number of immigrants, and by travelling long distances with the people was able to give them all possible assistance and advice. All other trains were carefully inspected between Port Arthur and Fort William and particular attention given to all immigrant passengers or intending settlers.

PROVISIONS, SUPPLIES AND SANITARY MEASURES.

Care was taken in arranging for immigrants to obtain meals and provisions required at a reasonable rate, also to see that there was a plentiful supply of good water in the cars, that they were kept in a clean, sanitary condition, and well ventilated, which is important, as it prevents the outbreak of disease among those who may have been affected by the confinement or sickness of the ocean voyage.

PRECAUTION TO PREVENT DISEASE.

A careful watch was kept for any sign of contagious disease and every effort made to perform all duties so that the people would understand that the Government was anxious that they should receive the best care and advice.

CAREFUL ATTENTION BY RAILWAY OFFICIALS.

The attention and consideration shown by the C. P. R. officials and employees for the welfare and comfort of immigrant passengers is deserving of special mention. The officials take an active interest in everything that will benefit the immigrants, particularly Mr. McNicol, the general passenger agent, who gives special attention to this class of travel, and the train men show by their actions that they realize the necessity of being very considerate with people, many of whom have very little knowledge of the ways or customs of this country.

SOME DELAYS AND POSSIBLE IMPROVEMENTS.

A considerable number of immigrants objected, some very decidedly, to the delay experienced in Montreal, which as you are probably aware is caused by the steamship passengers arriving there sometimes on Saturday and frequently on Sunday and having to wait until Monday for a train. This, under present arrangements, would appear to be unavoidable, but it is to be hoped that the railway company will decide to run a daily train next season, or that the immigration will so increase that the C. P. R. will be able to forward them by special train which is decidedly the best way for foreign immigrants to travel. If this cannot be done, would it not be possible and advisable to arrange so that those desiring to save hotel expenses could stay in the Immigration Building, Quebec, until they could make direct train connections to their destination? If the people were plainly informed that they could have this privilege it would do away with some cause for complaint.

GOOD CLASS OF ARRIVALS.

It is satisfactory to note that the past season's immigration was of a very desirable class, being composed of hardy intelligent people, a large number of whom were possessed of sufficient means to make a comfortable start, and the great majority will undoubtedly become good settlers. I learned of parties and families that had large amounts of funds, and from reliable information consider that the amount of money brought in according to numbers was greater than ever before.

HEALTH OF IMMIGRANTS.

The general health of the arrivals was exceptionally good. With the exception of two cases of measles in the early part of the season there was an entire absence of contagious disease, and the few other cases of illness were of a comparatively trifling nature.

THE LABOUR MARKET.

The demand for labour in the vicinity of Port Arthur has been very limited, the supply being ample, with the exception of female domestics for whom there is constant inquiry. There have been some disappointments, and until there is a distinct improvement in general business it will not be advisable for immigrants of the labouring class to come here as they would not be likely to secure situations at remunerative wages.

SMALL NUMBER OF ARRIVALS. REASONS THEREFOR.

The number of immigrant arrivals en route to the western provinces during the past ten months must be considered disappointing as there appeared to be at the commencement of the season good reason to expect a largely increased immigration. Special efforts were being made to secure the right class of settlers, times were steadily improving, and the many inducements offered should have brought a much larger number of people. In conversation with the best class of immigrants I was informed that the

general belief in other countries was that times were very bad in America, which was understood to mean Canada as well as the United States, and that this, with the exaggerated ideas about the hardships of a prairie life in what was believed to be a very severe climate, were some of the principal reasons for the small immigration to the Canadian North-west. It is a well known fact that during times of general depression the immigration movement is not large, and taking all things into consideration it may fairly be stated that the result of the past season is as satisfactory as could reasonably be expected.

INCREASED IMMIGRATION EXPECTED.

There are undoubtedly good prospects for a larger immigration in future, as the past season's splendid crops in Manitoba and the Territories must prove very beneficial in advertising the great natural resources of the country and convincing sceptical people that the climatic drawbacks are not at all serious.

The large number of cattle exported this year, estimated to amount to over forty thousand head, besides those shipped east for local consumption, as well as the successful efforts made in the manufacture of butter and cheese, and the evident desire to give more attention to mixed farming, are all having a tendency to make the country better and more favourably known, and the result will be a large yearly increase in the number of desirable settlers.

LARGE NUMBER OF FARM LABOURERS.

The two farm labour excursions that the Canadian Pacific Railway ran in the month of August proved very successful. Over six thousand people, principally from Ontario, took advantage of the cheap rate, between four and five thousand being actual labourers who went to different parts in the west to assist in gathering the splendid harvest. When it is remembered that even this large number of men did not supply the demand a fair idea may be formed of the amount of labour required to handle this great crop.

BENEFICIAL RESULTS OF LABOUR EXCURSIONS.

It is difficult to estimate the amount of good these excursions may accomplish by causing to be distributed among the residents of the older provinces a more reliable knowledge of the western country and thereby induce those who decide to make a change, particularly young men, to go to Manitoba or the Territories instead of to the neighbouring republic.

I have conversed with a number of the excursionists who have been returning during the past month. They speak highly of the country and state that a considerable number are remaining and many others will return to settle in the spring.

CORRESPONDENCE AND OTHER DUTIES AT PORT ARTHUR.

I have given careful attention to a considerable amount of correspondence, including many letters of inquiry which were carefully answered. The limited number of immigrants remaining here have received all necessary assistance in reaching their friends and obtaining work. Good care has been taken of the immigration property, and every effort made to comply with instructions and thoroughly perform all duties.

I have the honour to be, sir,

Your obedient servant,

J. M. McGOVERN.

No. 9.

REPORT OF MR. B. L. BALDWINSON.

(ICELANDIC AGENT.)

WINNIPEG, 31st October, 1895.

H. H. SMITH, Esq.,
Commissioner of Dominion Lands and Immigration,
Winnipeg.

SIR,—In conformity with instructions contained in a circular letter issued from your office on the 28th September last, I have the honour to submit to you herewith my thirteenth annual report on Icelandic immigration and colonization.

FEW ARRIVALS FROM ICELAND.

Under this head I can be very brief, for the simple reason that during the present year there has not been any immigration from Iceland to report upon, only five persons having reached Canada from that country during the past summer, while thirty-three Icelanders have come in from the United States, and one from Norway, making a total of 39 persons.

When we consider the success that attended my efforts to promote Icelandic immigration to Canada during and including the eight years from 1886 to 1893, when, it may be said, that I had almost full charge of Icelandic immigration affairs, and during which time I brought out and settled in this country no less than 5,637 persons, or an average of 708 souls per year, it is somewhat difficult to realize the fact that in two short years this immigration has been brought down to five souls.

CAUSES OF FALLING OFF.

It is evident that there exists a reason for this tremendous falling off from the numbers of previous years, and it may be assumed that it is attributable to several causes, among which may be mentioned:

1. The industrial and commercial depression that has existed in Canada during the past three years.

2. Simultaneously with the depression in Canada it has happened that times have been really good in Iceland during the past two years. The two chief industries of that country, those of fishing and stock-raising, have been most remunerative, and all classes of the people have been experiencing a degree of prosperity, which, it is said, has not been exceeded at any time during the present century. This has brought with it the natural results to emigration, viz., that with a fair degree of prosperity at home, the people of the country do not feel the necessity nor the desire to tear themselves away from their homes and old associations, and flock to a foreign and comparatively unknown land to hunt for a fortune. The desire of the people to emigrate or otherwise change present conditions always diminishes in proportion to the increase in their prosperity at home.

3. The working or servant classes in Iceland have, by law, received their emancipation within the past two years. There has been a law on the statute book of Iceland which has always been rigidly enforced until it was rescinded by an Act of Parliament in 1894, by which all persons above the age of sixteen years were obliged to have what was termed a legal abode for one year ahead from the 14th of day April in every year. This meant that the servant classes had to hire for one year in advance with some farmer or other householder. In other words, they were forced by law to be constantly in the service of some householder, at such wages as they could command. This, in past years, has averaged, for an able man-servant, $20.00 to $35.00, and for a

female domestic from $6.00 to $10.00 for 365 days' service, and with these wages they have had to clothe themselves as best they have been able. It will be seen, therefore, that the people have been kept in actual serfdom, and they have been much dissatisfied with their condition. When this law was rescinded in 1894 the classes to whom it had applied were made free to earn a livelihood at any place and in any manner suited to their tastes. The result of this was that wages at once rose, so that they are now earning much more at home than they have ever before been enabled to do. This makes them contented to remain there under the new order of things. They love their country much better now than they could possibly have done under the old system. This is one of the reasons that makes them more unwilling to leave their country now than they have been in former years.

4. In my last year's report I mentioned the fact that no special effort had been made by the Government during that year to promote immigration from Iceland to Canada. This applies with equal truth to the present year. No one has been sent to that country to do emigration work since the fall of 1892. This no doubt is not the least reason for the falling off in numbers from former years. It is no more possible to secure a good class of immigrants from any country without active and well directed operation in the country from which the immigrants are to be drawn, than it is to reap a good crop without the proper preparation of the soil from which such crop is to be reaped.

5. Drawing their inspiration from letters from dissatisfied immigrants and settlers, the press of Iceland has been most assiduous in decrying Canada. The papers of that country have made it appear that there existed in this country not only scarcity of labour and low wages, but also that there was actual starvation among the poorer classes and late arrivals here, which would certainly be shared by any who should venture to emigrate to this country. One of these papers, last spring, actually issued an appeal to the Government of Iceland to assist in bringing back to that country all the Icelandic settlers who were dissatisfied in Canada, and would be willing to return to their former homes, at the same time urging their countrymen in this country to assist in the movement. Public appeals like this naturally had a deterring effect upon those who otherwise would have decided to emigrate.

I am credibly informed that during the summer just closed the officials of Iceland, actually did succeed in getting a small party of emigrants, who had reached their port of embarkation at Reykjavik, destined for Canada, to return to their homes. This could not possibly have happened had an agent been with these people to look after their interests.

I cannot close this part of my report without expressing regret that the Government last year found it necessary to have the publication of the "Landneminn" (The Settler) discontinued. This was a monthly paper devoted exclusively to immigration and Canadian interests, 3,000 copies were sent out monthly, with one of the leading journals of the country. The paper was reaching the homes of the people and doing excellent service, and was growing in favour with its readers with every issue. I do sincerely hope that with returning prosperity in this country the Government may see its way to resume the publication of that paper with the coming year.

ICELANDIC IMMIGRATION FROM THE UNITED STATES.

We have, as already said, received 33 persons from the United States during the past season. The number represents about one-tenth of what we might have had if the Government had been in a position to incur some expenditure on an effort to secure as settlers those who, in several letters addressed to me during the months of March and April last, I was informed would be willing to move with their families and locate themselves in the Canadian North-west. I have no doubt that had an intelligent and active agent been sent over to North Dakota and Minnesota at that time, he would have succeeded in securing a large party of good settlers. The Icelandic settlements in those states are already fully settled, and those who cannot obtain suitable lands there, excepting at exorbitant prices, would be only too glad to avail themselves of the

opportunity of taking up free homesteads in this country, if they were properly encouraged to do so. The 90 days quarantine on cattle—notwithstanding that the expense of such quarantine is borne by the Canadian Government—during the summer season has for years past proved to be the chief obstacle in the way of getting suitable immigrants from that country. I have always been, and still am under the impression that much more attention should be paid to, and the necessary expense incurred in encouraging emigrants from the states to move to Canada, than has so far been done. Foreigners make better settlers after having been there for a time, learnt the English language, become accustomed to the country, and gained experience in agricultural pursuits, than when they come directly from their native land. Besides, after having lived in the states they generally come to this country with sufficient means in live stock, farm implements and cash, to more than repay the country any expense that may be incurred in bringing them here.

COLONIZATION.

Under this head I can with increased force reiterate the statement made in my last year's report that the various Icelandic settlements in this province and the North-west Territories are in a satisfactory and prosperous condition.

I have not had the opportunity of personally visiting any of the settlements, excepting the Gimli colony, on the west shore of lake Winnipeg, during the past four years, but I receive private reports from correspondents in the various settlements, from which it would appear that there is a steady progress among the settlers, with but few exceptions. Each year's labour adds something not only to the age and experience, but also to the wealth of the individual settler.

There are at present at least 10 settlements of Icelanders in the Canadian North-west, not to mention the nucleus of a settlement located in the Okanagan valley, B.C. The oldest of these and the largest is the Gimli colony, which dates its existence from the year 1876. It contains some 1,500 people who have lived there under conditions somewhat similar to those which they were used to in their native land, viz., fishing and stock-raising. Very little grain-growing has been done in the colony during past years. This summer, however, has seen a marked change for the better in that respect. In the spring of this year a large number of settlers made an attempt to raise wheat on a much larger scale than they had ever done before. They procured good seed wheat through the offices of Mr. Eggert Oliver, a merchant of Gimli, who is an experienced farmer from the Argyle settlement. Under his direction the attempt proved most successful, the patches in many places yielding the equivalent of 40 bushels to the acre of good sound No. 1 hard wheat. Oats and barley were also tried on a small scale with good success. It has thus been demonstrated that the soil in the settlement when cleared of its brush timber and properly drained is well suited for grain-growing. But as the nearest market for any grain that may be raised in this colony is at West Selkirk, and this at a distance of 40 miles without railway communication, the settlers will be obliged to use their grain for feeding purposes. The live stock market in this settlement is annually becoming more important and remunerative. The settlers find a market for all the stock they can raise, at fair prices. The grain that is grown in the settlement can be utilized to feed cattle for market, and this should mean considerable additional wealth to the settlers.

The buildings in this settlement have always been fairly good, but each succeeding year adds to their stability and appearance, as log-houses are now fast giving place to comfortable frame dwellings, built of lumber manufactured in the settlement. The settlement has a saw-mill, owned by two of the settlers, which has now been in operation for years. This enables the settlers to get their lumber at a minimum cost.

There are two churches with one resident minister, and ten school-houses, with Icelandic teachers in the settlement. The settlers also own and run two steamboats, one of which is kept fully employed in carrying merchandise to and from the settlement. The Dominion Government has this summer built a splendid wharf at

"Huansa," in the centre of the settlement. This will prove of great convenience and value as population grows and the trade increases, and it is to be hoped that the Government may see its way to build another similar wharf at Gimli, where it is much needed, and without which the village cannot grow much beyond its present size.

Lastly I would say, in reference to this colony, that those residing on Big Island in lake Winnipeg have the most wretched mail service, their mail only reaching them twice per month. They have for years past been asking for a weekly service, and it seems to me that, after a residence of twenty years in the colony, the Government should grant them this without delay.

THE ARGYLE SETTLEMENT.

The Argyle settlement dated its birth from the year 1881, and contains some 900 people. It is the youngest and yet the most progressive and the wealthiest of all the Icelandic, and, I think I may safely add, foreign settlements in Western Canada. It is truly "Canadian" in vigorous growth and stability When I last visited the colony in 1890 I reported very fully on its condition, but from the latest report of a gentleman who visited it only last month, on behalf of the provincial government, I extract the following for your information. He says: "The harvest in the Icelandic settlement is exceedingly good, the average yield of wheat being 35 bushels, while oats and barley yield 50 and 30 bushels respectively per acre. The yield of roots and vegetables is proportional to that of the grain. The frost has done very little damage in the settlement, and all their wheat is classed as 'No. 1 hard.' A large number of these Icelandic farmers have placed themselves in such a position that they can rest (summer fallow) their wheat fields every third or fourth year. All their work on their farms is carefully done and special attention is paid to procuring only good wheat for seeding purposes. Experience has taught them that it pays better to have less area under cultivation and have it carefully worked than to have a larger acreage indifferently prepared. 'It is generally acknowledged that the Icelandic farmers have a greater yield per acre, and of better quality, than the native farmers who live beside them. Their attention to their stock is fully equal to that which they devote to their wheat fields. Their horses, cattle, sheep, swine and poultry are of the best kinds. At an agricultural show held at Baldur on the 5th inst., several of the settlers exhibited their stock, and all of them received prizes. A majority got first prizes for their exhibits. The result is that these farmers can and do now get the best price for all that they have to sell. They have disposed of a large number of cattle and pigs during this year, and will continue in that line annually hereafter. Two brothers in the settlement who farm in partnership state that they expect to be able, annually, hereafter, to sell cattle and pigs for from 300 to 400 dollars, without reducing their stock below their present numbers. This would be nothing remarkable if these brothers paid all their attention to the raising of live stock, but they pay equal attention to grain growing, and this year have marketed from this year's yield 5,120 bushels wheat of the best quality, 1,750 bushels oats, 150 bushels barley, and 300 bushels rye, to say nothing of potatoes and other garden vegetables.

"Notwithstanding the low price of wheat, it is safe to assert that the farmers in the Argyle settlement could wipe off all their debts with this year's wheat crop.

"The settlement has made rapid strides of progress during the last four years. Their wheat fields are much larger now than they were then, and excellent buildings have been erected all through the settlement. Their roads have been improved so that it is now a pleasure to drive over them."

It is needless to say that most farmers in this settlement own more than one quarter section of land. Very many own two and three quarters, and some own four and five quarters. One of the settlers has a thousand acres. Every quarter section in the colony runs in value from $600 to $3,000. Over 20 farmers reaped this fall from 5,000 to 7,000 bushels of wheat each, the value of which will average over $2,500.00 per man, at present market price. They value their lands according to their productive power, based on their experience of past years. According to this method of valuation, each quarter section of arable wheat land is worth fully $2,000.00.

When we consider that the oldest of these settlers began operations there only fourteen years ago, and that all have come in poor, averaging $104 per family, and without any knowledge of agricultural work; that by their intelligent industry they have succeeded in turning the wilderness of the Cypress hills into a perfect garden of fruitfulness, by which they have attained their present prosperity and added wealth to this country, it seems to me that their example cannot fail to challenge the admiration and respect of all unbiassed minds. They have clearly proven that they are a class of settlers well worthy of the efforts that have been made to get them into this country and settle them here. Let it be known also that the people still in Iceland are fully equal to those who have already come to Canada.

THE SHOAL LAKE COLONY.

The colony at Shoal lake on the east side of lake Manitoba is in a fairly prosperous condition. The settlers there, of whom there are about fifty families, pay most attention to stock-raising. They find a ready market in Winnipeg for all their stock and other produce, and, notwithstanding their disappointment in not getting the Hudson Bay Railway which they had hoped would run through their country, they cherish a hope for future prosperity, and appear to be fairly contented with the success thus far attained.

THE RED DEER SETTLEMENT.

The Red Deer settlement in Alberta contains thirty-six families, all of whom came from North Dakota. They have been there some six years. They did not have much means to commence with. They pay most attention to stock-raising, for which this settlement is excellently adapted. The number of their present stock will average about twenty head of cattle, two or three horses, twenty sheep, and some pigs and poultry, to each family. They also have a full stock of agricultural implements. These settlers are satisfied with Alberta, and have strong faith in the future of their adopted country.

GENERAL REMARKS.

Speaking generally, I would say that the Icelanders have weathered the storm of depression well, much better, indeed, than some settlers of other foreign nationalities in this country. Their progress is continuous and general, whether they are settled on farms or otherwise employed in the various cities and towns of our province and territories. Speaking of my personal work during the past ten months, I can only say that it has been performed on much the same line as last year. Correspondence has fallen off, only 370 letters having been received and 403 sent out. This may be accounted for by the fact that there have not been any new arrivals to attend to or communicate with, as also that, since the beginning of last May, or during the past six months, I have been fully employed in your office during office hours, and have only been able to attend to this branch of the immigration work in overtime, during the mornings before and evenings after office hours.

I have the honour to be, sir,
Your obedient servant,

B. L. BALDWINSON,
Icelandic Agent.

No. 10.

REPORT OF MR. HUGO CARSTENS.

(German Officer.)

Dominion Immigration Office,
Winnipeg, Man., 31st October, 1895.

To H. H. Smith, Esq.,
Commissioner Dominion Lands.

Sir,—I have the honour herewith to submit my report on German immigration passing through Winnipeg for the ten months ending 31st October, 1895.

STATISTICS.

The total number of immigrants coming specially under my care, as shown by statement marked "A" attached hereto, during these ten months, was 977, being of the following nationalities: 769 Germans, 108 Hungarians, 43 Poles, 27 Slavs, nine Bohemians and Roumanians, eight Swiss, five Hollanders and nine Jews. Of these 384 came from Russia, 290 from Germany, 157 from Austria and Hungary, and 146 from the United States, being distributed as follows: Manitoba, 423; Assiniboia, 176; Alberta, 339; Saskatchewan, 37, and British Columbia, two.

While this shows a marked falling off in the total number as compared with previous years, and a large decrease of immigration from Russia and Austria, there has been a marked increase in immigrants from Germany proper—an increase of about 125 per cent.

NO MENNONITES.

A very strange fact has been this season that not one Mennonite has come to this country from either Russia or Germany.

GOOD AND SUBSTANTIAL SETTLERS.

The whole of these immigrants, with few exceptions, were agriculturists, and of a good class. From memos. kept, while attending to the exchanges of foreign moneys and the cashing of drafts at the local banks here, I find that about $40,000 in cash was brought into this country by these people.

About 70 per cent of these immigrants at once settled on lands and the remainder have, for the time being, secured employment in Manitoba to increase their capital. Out of these new arrivals quite a number of Germans, who had been working in the Mennonite reserves of Manitoba during the last year or two, also settled on lands of their own last spring.

CAUSE OF DECREASE OF IMMIGRATION.

The decrease in immigration, referring specially to my branch, may, I believe, be ascribed to the partial failure of crops last year in some of the German settlements, and to the general depression and consequent scarcity of employment, restraining those here from sending for or advising their friends to come to this country for the present.

This is proven by the fact that nearly all my immigrants this season came from new districts from which we have hitherto not been accustomed to receive any, while those older districts from which the bulk of immigration came in former years have this season given but very few immigrants to our Canadian North-west.

As soon as an improvement in these matters is manifested an increased immigration may be looked for, especially as the conditions necessitating or urging emigration from Russia, Germany and Austria are becoming more and more pronounced.

GERMANS FROM THE UNITED STATES.

The movement of Germans from the United States has not come up to my expectations, but I understand that quite a number of them came by the Soo line and the Pacific Coast to Alberta, and so escaped my observation; and it must be remembered that the department has made no special effort to get Germans from the United States, whereas other nationalities have special agents at work for this purpose, although the Germans are more numerous than they, and would, I believe, make equally as good settlers.

CORRESPONDENCE

The correspondence of this branch of the office has been 718 letters written and 673 letters received, besides which I have mailed about 500 packages of maps and pamphlets, a total of 1,891 during the past ten months.

The inquiries about Manitoba and the North-west have been more numerous than in the past and have come mostly from a desirable class and from altogether new districts, proving that Canada is becoming more known on the continent as a suitable field for immigration.

COLONIES.

Since my last report a few new colonies have been started in Northern Alberta, and those already established there have been extended on all sides and additions made to their numbers; also the two settlements north of Gladstone and north of Beauséjour in Manitoba, commenced in 1894, have been adding considerably to their numbers, while the older colonies in Assiniboia have had but little increase this summer.

There are now in all about 52 distinct German colonies, two in Manitoba and the balance in the Territories, numbering about 2,300 families, with about 10,000 souls, having some 45,000 acres under cultivation and possessing some 3,500 horses, 20,000 head of stock, and 3,000 sheep.

All the colonies are making steady material progress, and are becoming rapidly assimilated with the conditions of their adopted country. They are already well supplied with public schools, which are well attended, showing that the settlers are anxious to have their children acquire the English language. At the same time there is a general desire that the children should, besides the English, also fully acquire their mother tongue, the German language; and I hope, when so petitioned, the North-west Government will grant that wherever the majority of the ratepayers or trustees so desire, German may be allowed in the public schools after a certain hour in the afternoon or on certain days in the week, and that provisions may be made to have teachers of such schools also examined in the German language.

It must be remembered that in the above figures regarding the colonies are not included the two large Mennonite reserves of southern Manitoba, nor those Germans living in the city or scattered singly throughout Manitoba.

CROPS.

The crop reports from the different colonies are not as favourable this year as one would wish them to be, summer frost having done considerable damage. This is especially the case with the colonies in Alberta, south of Edmonton, and with some of the settlements in Assiniboia, while those colonies situated north-west and north-east of Edmonton have almost wholly escaped all damage by frost, and those in Manitoba altogether.

EMPLOYMENT.

In the spring and the early summer emloyment was scarce and some difficulty was experienced in placing those wholly unaccustomed or unwilling to accept farm work, while there was practically no difficulty in securing farm employment for all willing and able to do farm work and to accept the then current wages. In this respect the Mennonite reserves are a great boon to the German immigrants seeking employment, as these always offer work to either single men or families.

THE YEAR'S WORK.

Besides attending to the correspondence as already above enumerated and attending to the receiving and taking care of the new arrivals, I have considered it my duty to do anything and everything in my power for the advancement of my people in this country, whether they were new arrivals or older settlers, and hope therein to have met with your approval. I also accompanied Professor Oleskow of Austria, as guide and interpreter in the interest of immigration, on his trip through Manitoba the North-west and British Columbia during part of the months of August and September, and again this month visited some of the colonies in the Edmonton district, full reports of which have been already sent you.

I have the honour to be, sir,
Your obedient servant,

HUGO CARSTENS,
German Officer.

STATEMENT of German Immigration during the Ten Months ending 31st October, 1895.

1895.	ADULTS.		Children under 12 years.	Total.	DISTRIBUTION.					NATIONALITIES.								FROM				Total.
	Male.	Female.			Manitoba.	Assiniboia.	Alberta.	Saskatchewan.	British Columbia.	Germans.	Hungarians.	Poles.	Slavs.	Bohemians and Roumanians.	Hollanders.	Swiss.	Jews.	Germany.	Austria.	Russia.	United States.	
January	18	10	19	47	26	4	17	. . .	. . . . .	37	. . . . .	3	. . . .	. . .	. . . .	. . .	8	12	8	22	5	47
February	3	1	5	9	9	. . . .	. . . .	. . . .	. . . . .	8	1	. . . .	. . . .	. . .	. . . .	. . . .	. . .	8	. . . .	. . . .	1	9
March	40	16	37	93	38	29	26	. . . . .	. . . . .	64	23	4	. . . .	. . . .	2	. . . .	. . . .	10	2	34	47	93
April	48	28	56	132	46	22	58	6	. . .	122	7	3	. . . .	. . . .	. . . .	. . . .	. . .	35	. . . .	61	36	132
May	92	80	158	330	106	47	151	25	1	267	43	2	4	5	1	8	. . .	132	64	100	34	330
June	36	28	31	95	25	27	43	. . . . .	. . . . .	33	22	18	22	. . .	. . . .	. . . .	. . . .	15	54	24	2	95
July	55	36	50	141	99	10	32	. . . . .	. . . . .	120	10	6	. . .	2	2	. . . .	1	26	18	91	6	141
August	30	14	12	56	39	15	. . . . .	2	. . . . .	51	. . . . .	2	1	2	. . . .	. . . .	. . . .	34	5	11	6	56
September	20	7	14	41	28	2	11	. . . . .	. . . .	35	1	5	. . . .	. . . .	. . . .	. . . .	. . . .	18	6	12	5	41
October	18	9	6	33	7	20	1	4	1	32	1	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .	. . .	. . . .	29	4	33
Totals	360	229	388	977	423	176	339	37	2	769	108	43	27	9	5	8	9	290	157	384	146	977

HUGO CARSTENS,
German Officer.

No 11.

REPORT OF MR. JOHN W. WENDELBO.

(SCANDINAVIAN OFFICER.)

DOMINION GOVERNMENT IMMIGRATION OFFICE,
WINNIPEG, 2nd November, 1895.

To H. H. SMITH, Esq.,
Commissioner of Dominion Lands and Immigration,
Winnipeg, Manitoba.

SIR,—I have the honour to submit my report on Scandinavian immigration to the Canadian North-west, through Winnipeg, for ten months ending October 31st, 1895.

ARRIVALS.

The total number of Scandinavians arriving through Winnipeg during the first ten months of 1895 was 683 souls.

DISTRIBUTION OF IMMIGRANTS.

Of the above number 42 settled upon land in Manitoba, 354 in the North-west Territories and 109 in British Columbia. 173 are living in towns or working on the railroads.

A FALLING OFF AND ITS CAUSES.

According to my report as compared with one for ten months in 1894, there was a decrease of Scandinavian immigration through this port, discernible, though very slight under the circumstances, which may be attributed to the following causes.

1st. The depression in trade, and the scarcity of employment during the last winter and spring, prevented our Scandinavian people here from aiding immigration to Canada, and, accordingly, hardly a single prepaid ticket was sent to Scandinavian countries during this season.

2nd. Scandinavian immigration to the North-west from the United States of America this season was largely drawn from the middle and western States, and accordingly it was more direct for a number of them to enter Canada by the Soo line via North Portal, so that, though knowing that quite a number arrived by that line, I had no means of keeping any account of them at all, but feel confident that had they as formerly come by way of Winnipeg, the report would have shown an increase instead of a decrease.

GENERAL OBSERVATIONS.

Scandinavian immigration to Western Canada amounted to very little until the season of 1887, when, as shown in my comparative statement of 1894, some 336 persons arrived, from which time a varied though steady stream has continued, depending to some extent from season to season upon the promise of employment and amount of wages to be obtained in Canada. The early Scandinavian immigrants were noticed to be more generally of the artisan than of the farming classes, so that but very little capital accompanied them to this country, except their industrious hands. They have in most cases, however, made good progress, and a number of them have shown good inclinations to adopt agricultural pursuits for a living.

It must be admitted that very few of the more wealthy Scandinavian farmers ever think it advisable for them to emigrate, but some few of the last two seasons' immigrants brought a fairly good starting capital with them, and nearly all the Scandinavians from the United States had first-class farming outfits.

PROSPECTS FOR THE FUTURE.

Scandinavians are now settled in small colonies spread over the whole of the Canadian North-west, and so although one district may have small adversities for a season, others will be prospering, and through their influence additions to the Scandinavian population in this country may reasonably be expected. The reports of the bountiful harvest this country has enjoyed this season should also largely increase Scandinavian immigration next season. Owing to reasonable expectations of extended prosperity in this country I feel confident that employment will be plentiful, and I have good hopes of being able to satisfy the new arrivals on that score, and by generously advertising the North-west a good increase in the farming classes may be expected.

SETTLEMENTS.

Not having personally visited any of the Scandinavian settlements for the last two years, it is impossible for me to furnish any correct statement of their condition, but from information obtained I am led to believe that nearly all the eastern settlements have had a fairly good harvest, and in most cases are well satisfied. Unfortunately all, or nearly all, the Scandinavians in Alberta have had an unfortunate harvest, and added to that, prairie fires have in some cases destroyed all they had, leaving a number of families without anything for the coming winter.

The Norwegian settlement at Balla Coola, British Columbia, has been increased in population to the number of about 90 souls during 1895, and the people there are said to be very happy and contented, some sixty comfortable houses having been erected during last winter and spring. But the amount of land cleared has necessarily been limited, owing to the nature of the country, it being all heavy timber land. Extensive and substantial improvements have been projected for the coming winter, such as a canning factory and saw-mills. The settlers have considerable revenue already from fishing, and apparently they are well satisfied with their prospects.

EMPLOYMENT.

During last winter and spring employment was very hard to obtain in this country; in fact, employment was scarcer last spring than I have ever known it to be during my 17 years' residence here. Yet the class of Scandinavian labourers making application for employment upon their arrival in Winnipeg, were, to my mind, well suited to the country, and, in contrast with former immigrants, more readily accepted the condition of things as they found them, by engaging in any employment to be had at the time, and willingly accepting the small wages generally offered by the farmers early in the spring. When, later in the season, good evidence of a bountiful harvest became visible, employment at once became plentiful at good remunerative wages, so that the late arrivals found plenty of employment awaiting them.

CORRESPONDENCE.

363 letters have been received, and 447 letters and 263 packages of maps and pamplets have been sent away. In such correspondence we have endeavoured to explain to the inquirer the advantages offered to Scandinavian farmers in the Canadian North-west, and I am personally confident that this has aided materially in bringing a number of good settlers to this country.

I have the honour to be, sir,

Your obedient servant,

JOHN W. WENDELBO,

Scandinavian Interpreter.

No. 12.

EXTRACTS FROM THE REPORT OF MR. G. PH. CLOUTIER

(French Translator at Winnipeg.)

(*Translation.*)

" Not having had the advantage of visiting any of the French colonies during the three years and a half that I have been attached to the immigration office, I cannot give you all the information concerning them that you might wish for. Nevertheless, by means of the correspondence which I have had with the colonies, and the information which I have obtained from different persons who have visited them, I may state that in general the colonists are satisfied.

" Though the number of the French and Belgian immigrants is less this year than last, it should be noticed that this is counterbalanced by the amount of capital brought into the country by those who have come. With hardly an exception, these colonists had sufficient money for their establishment. Even those who came to the country to work during the last harvest find themselves in a very satisfactory position; some are already located on homesteads in the lake Dauphin district, others have settled in the French parishes of the Red river valley, and others are waiting until spring to locate.

" During the last ten months I have received 233 letters, asking for information, more particularly as to the general advantages of this part of Canada, and have sent letters, pamphlets and maps to the writers of these letters, and to people who were named to me by the new colonists on their arrival in Winnipeg."

No 13.

REPORT OF MR. R. L. ALEXANDER.

(TRAVELLING IMMIGRATION AGENT ON CALGARY AND EDMONTON RAILWAY.)

CALGARY, 1st November, 1895.

To H. H. SMITH, Esq.,
Commissioner of Dominion Lands.

SIR,—I have the honour to submit my report for the ten months ending 31st October, 1895.

TRAVELLING.

During this period I made 84 round trips between Calgary and Edmonton, besides a few to some of the intermediate points, thus travelling 35,150 miles by train. I have also done considerable driving in those parts of the country which in previous years I had not been able to reach, and in so doing I drove about 670 miles, and I not only was enabled to call upon many of the new settlers but made myself familiar with much of the unsettled land, thus gaining much essential and useful knowledge, which will be of great benefit in giving information to land seekers.

THE CROPS IN ALBERTA.

The crops taken as a whole are not so good as that of last year. The yield of straw was very large, but owing to the cool weather throughout the summer months, and more rain in some parts than was required, the grain continued to grow and not ripen, and hence considerable of it was caught by the frost which came much earlier than it has been known to do for many years back, so that while there was an enormous yield of straw the yield of grain was much below the average. The crops that suffered most were those sown upon the more newly cultivated lands and those that were sown late, which with new settlers constituted the greater portion of their crop. Yet on the other hand the grain sown upon the older and better cultivated lands, and consequently earlier, escaped.

The root crops all over the district are good and the yield large.

MORE MIXED FARMING.

During my drives I was much pleased to see that the settlers are more than ever impressed with the idea of going into mixed farming, and the increase upon the homestead of cattle, sheep, pigs and poultry is very perceptible.

PORK PACKING ESTABLISHMENTS.

Pig raising is being gone into much more extensively than hitherto, the establishment of a pork packing house at Calgary and one at Edmonton having created a greater demand for hogs.

CREAMERIES, &C.

Creameries and cheese factories are increasing, and just as soon as the localities become more closely settled these desirable and much needed industries will be established throughout the country.

AGRICULTURAL SHOWS.

On the 26th September I attended the agricultural show held at Lacombe. On the 3rd October I also attended the show in Innisfail, and on the 10th of same month I had the pleasure of being at the fair held in Red Deer, and was pleased to see the marked improvement over past years in the exhibits of live stock of all kinds, horses, cattle, sheep and pigs being largely represented, many of the animals shown being thoroughbred stock.

The exhibit of cheese and butter at all of these fairs was particularly good. The root exhibit was also very good. At the Innisfail show the combined weight of the six Swede turnips, awarded the first prize, was 108 lbs., one of them weighing 23 lbs. and being 40 inches in circumference.

THE BEAVER HILLS COUNTRY.

On the 13th and 14th July I made a trip into the "Beaver Hills" country and in doing so called upon a number of settlers in that locality amongst whom were several of the Parry Sound people. They are doing well, and are well satisfied with the country and their progress.

PROGRESS OF THE COUNTRY.

As in past years, during my drives to reach the outlying settlements and unsettled lands I had to cover some of the localities visited by me in 1893-94, and I was exceedingly well pleased with the marked improvements and progress everywhere. Many new dwellings have been built, as well as new barns and outhouses. Farms have been fenced and in many localities improvements have been made on the public roads, thus giving the country a more home-like appearance.

SCHOOLS.

School districts have been and are being formed wherever there is a sufficient number of children to entitle them to a school. Comfortable and commodious school-houses are being erected, and in many places where they were formerly only kept open during the summer months they are now being kept open throughout the year.

SETTLERS GENERALLY SATISFIED.

In my conversation with the settlers in reply to my inquires as to how they liked the country, and if satisfied with it, the general reply was that in general they were satisfied, notwithstanding that this season has not been a good one.

Take the case of Mr. John Cleveland, a settler who came from Nebraska to Lacombe in 1894. He could not say hard enough things about the country, and was so displeased that he decided to leave and go to Southern Utah where he had some friends and whose glowing accounts of that place induced him to go and see it. Accordingly last spring he started off with his teams and wagons and drove to Utah, expecting to to find a "land flowing with milk and honey," but alas he was doomed to disappointment. He found the country so much inferior to this that he turned around and with the same outfit reached Lacombe a short time ago, and says he saw nothing on his trip to compare with the Lacombe district, and he is here now as he says himself "to stay."

CUSTOMS ENTRIES.

I have been of much service in passing through the Customs settlers' effects. Holding as I do a commission of justice of the peace for the Territories, I am in a position to take their affidavits to the necessary papers, filling out these papers and passing their goods through the Customs, thus saving the new-comers considerable trouble and some expense. I passed about 70 consignments during the season.

GROWING TOWNS.

The towns along the line of railway between Calgary and Edmonton are steadily growing, and at every point settlers can procure their supplies, even at the smaller places, for less money than they can at the larger towns.

NEW MILL AND ELEVATOR.

At South Edmonton a large elevator has been erected, and an oatmeal mill has been built and will soon be ready to manufacture. On the 29th October, through the kindness of the foreman, I was shown through the establishment. It is fitted up with all the newest kinds of machinery for the manufacture of all kinds of oatmeal. The capacity is 50 barrels a day.

INDIANS DESTROYING EGGS OF WILDFOWL.

In visiting amongst the settlers numerous complaints were made as to the Indians destroying the eggs of the wild ducks and geese, thus doing much to render these birds scarce. Could nothing be done to remedy this great evil?

GENERAL INFORMATION.

Accompanying this I send you four schedules.

Schedule "A" shows the number of cars coming from the various States, and from the other provinces of the Dominion of Canada, the number of horses, cattle, sheep and pigs, together with their values. Out of the 179 cars, 131 came from the United States. Minnesota contributed 37, Dakota 30, Kansas 25, Nebraska 14, Washington 11, Iowa 5, Michigan 4, Idaho 2, Oregon 2, and Wisconsin 1. The remaining 48 came from the other provinces of Canada.

Schedule "B" gives the number of cars of live stock and effects which arrived during each month, where from, and destination.

"C" gives the number of individuals arriving each month and from where they came, the number of adults, males and females, and the number under the age of 12, males and females.

"D" shows the number coming from each state, the number from the British Isles, Europe and provinces of the Dominion.

During the season quite a large number of settlers came in by trail, of whom I was not able to get a record.

Inquiries from residents of the United States asking for information, about Alberta in particular, continue, and I have answered them all, giving the information sought.

I have the honour to be, sir,
Your obedient servant,

R. L. ALEXANDER,
Dominion Government Travelling Immigration Agent.

SCHEDULE A.

STATEMENT Showing Number of Cars of Stock and Settlers' Effects arriving between Calgary and Edmonton for the 10 months ending 31st October, 1895.

No. of Cars.	Where From.	Live Stock.				Value of car lots.	Value of lots less than car loads from the United States.	Total value.	Remarks.
		Horses.	Cattle.	Pigs.	Sheep.				
						$ cts.	$ cts.	$ cts.	
30	Dakota, U. S	156	28	16	158	28,150 00	3,550 00	31,700 00	
5	Iowa do	38	.....	.....	.....	4,900 00	900 00	5,800 00	
2	Idaho do	20	.....	.....	.....	2,000 00	.....	2,000 00	
25	Kansas do	143	.....	14	.....	22,650 00	5,200 00	27,850 00	
37	Minnesota do	124	119	49	.....	31,350 00	5,500 00	36,850 00	
4	Michigan do	18	3	.....	.....	3,650 00	1,500 00	5,150 00	
14	Nebraska do	52	32	10	.....	14,100 00	5,350 00	19,450 00	
2	Oregon do	5	.....	.....	.....	1,450 00	250 00	1,700 00	
11	Washington, U.S	169	.....	22	.....	10,700 00	7,700 00	18,400 00	
1	Wisconsin do	2	.....	.....	.....	900 00	.....	900 00	
	Other states	.....	125	.....	.....	.....	40,725 00	40,725 00	
131	Total United States	727	307	111	158	119,850 00	70,675 00	190,525 00	
30	Ontario	83	30	17	11	29,550 00	.....	.....	
14	Manitoba	17	161	14	.....	11,800 00	.....	.....	
4	British Columbia	11	5	2	.....	3,650 00	.....	.....	
48	Total Dominion of Canada	111	196	33	11	45,000 00	.....	45,000 00	
131	United States total	727	307	111	158	119,850 00	70,675 00	190,525 00	
48	Dominion of Canada total	111	196	33	11	45,000 00	.....	45,000 00	
179	Grand total	838	503	144	169	164,850 00	70,675 00	235,525 00	

CALGARY, 1st Nov., 1895.

R. L. ALEXANDER,
Dom. Govt. Travelling Im. Agent.

SCHEDULE B.

STATEMENT of Number of Cars, Live Stock and Settlers' Effects arrived during the ten months ending October 31st, 1895, between Calgary and Edmonton.

Month.	No. of Cars.	Live Stock.				Value.			Where from.					Destination.											
		Horses.	Cattle.	Sheep.	Pigs.	Car Lots.	Lots less than Car loads from U. S.	Total Value.	Ontario.	Manitoba.	B. Colum.	United States.	Total.	Edmont'n.	Leduc.	Wetask'n.	Lacombe.	B. Falds.	Red Deer.	Penhold.	Innisfail.	Bowden.	Olds.	Didsbury.	Total.
1895.						$ cts.	$ cts.	$ cts.																	
January	2	7			11	1,400 00		1,400 00				2	2	2											2
February	8	31	21		5	6,550 00	1,500 00	8,050 00				8	8	2	3	2			1						8
March	31	138	40	13	38	28,600 00	7,050 00	35,650 00	9	1	1	20	31	16	6	2	3		2		2				31
April	71	302	178	3	50	65,500 00	33,150 00	98,650 00	16	11	1	43	71	21	11	19	9		2	1	4	1	2	1	71
May	14	53	22	3	22	12,750 00	6,000 00	18,750 00	2	1		11	14	6		6	1	1							14
June	10	88		25		9,600 00	2,950 00	12,550 00				10	10	5	2	1	2								10
July	7	46	151	120		6,250 00	7,750 00	14,000 00	1			6	7	3	2	2									7
August	8	30	35	3	3	7,550 00	3,250 00	10,800 00				8	8	2	2	1	2		1						8
September	11	54	33		5	9,700 00	3,425 00	13,125 00	1			10	11	4	2	3	1				1				11
October	17	89	23	2	10	16,950 00	5,600 00	22,550 00	1	1	2	13	17	10	3	3			1						17
Total	179	838	503	169	144	164,850 00	70,675 00	235,525 00	30	14	4	131	179	71	31	39	18	1	7	1	7	1	2	1	179

R. L. ALEXANDER,
Dominion Government Travelling Immigration Agent.

CALGARY, November 1st, 1895.

SCHEDULE C.

STATEMENT of Immigrants arriving during the 10 Months ending 31st day of October, 1895, between Calgary and Edmonton.

Months.	Sexes.				Total.	Where From.																						Total.
	Males.	Females.	Males under 12 yrs.	Females under 12 yrs.		Ontario.	Quebec.	New Brunswick.	Nova Scotia.	P. E. Island.	British Columbia.	Manitoba.	England.	Ireland.	Scotland.	Wales.	Austria.	Belgium.	Denmark.	France.	Germany.	Norway and Sweden.	Prussia.	Russia.	United States.	Newfoundland.	China.	
1895.																												
January	20	6	5	10	41	6	....	....	....	2	....	2	1	....	1	....	....	....	....	....	1	....	....	10	13	....	5	41
February	41	13	3	11	68	8	4	....	....	....	5	1	1	....	1	1	....	....	....	....	....	....	....	....	47	....	Of English descent.	68
March	135	74	60	49	318	34	3	....	5	1	41	3	5	....	....	....	....	....	....	....	....	....	....	....	226	....		318
April	343	142	122	89	696	99	9	....	....	....	29	55	8	16	27	2	....	....	....	1	....	18	3	12	417	....		696
May	148	69	72	71	360	21	3	....	5	....	1	15	22	4	1	2	....	....	1	....	37	8	....	92	148	....		360
June	122	42	25	26	215	10	2	....	....	....	3	9	15	2	3	....	....	....	....	....	1	19	....	3	148	....		215
July	92	42	51	40	225	32	....	2	1	....	5	2	4	1	....	....	18	3	....	....	....	....	....	33	124	....		225
August	82	42	31	28	183	25	7	1	1	2	15	8	4	1	1	....	....	....	....	....	8	2	....	....	108	....		183
September	83	31	25	25	164	18	....	....	.	....	12	2	10	5	1	....	....	....	....	....	12	....	....	....	103	1		164
October	61	46	45	46	198	12	....	....	....	....	22	1	6	1	....	....	....	....	....	....	....	....	....	....	156	....		198
Totals	1,127	507	439	395	2,468	265	28	3	12	5	133	98	76	30	35	5	18	3	1	1	59	47	3	150	1,490	1	5	2,468

CALGARY, 1st November, 1895.

R. L. ALEXANDER,
Dom. Govt. Immigration Agent.

SCHEDULE D.

STATEMENT showing Number of Settlers between Calgary and Edmonton from each State and Province or Country during 10 months ending 31st October, 1895.

State.	Number.	Province or Country.	Number.	Remarks.
				Synopsis.
California	12	Ontario	265	
Colorado	3	Quebec	28	Dominion of Canada ... 544
Connecticut	1	New Brunswick	3	Newfoundland .. 1
Dakota	283	Nova Scotia	12	British Isles ... 146
Illinois	2	Prince Edward Island	5	Europe ... 282
Idaho	10	Manitoba	98	United States ... 1,490
Iowa	51	British Columbia	133	China ... 5
Ind. Territory	2			
Kentucky	7	Total, Dom. of Canada	544	Grand total ... 2,468
Kansas	119			
Massachusetts	26	England	76	
Michigan	74	Ireland	30	
Montana	12	Scotland	35	
Minnesota	300	Wales	5	
New York	20			
New Jersey	5	Total, British Isles	146	
Nebraska	134			
Oregon	79	Newfoundland	1	
Ohio	9			
Pennsylvania	1	Austria	18	
Tennessee	4	Belgium	3	
Utah	1	Denmark	1	
Vermont	13	France	1	
Washington	273	Germany	59	
Wisconsin	48	Norway and Sweden	47	
Wyoming Territory	1	Prussia	3	
		Russia	150	
Total, United States.	1490			
		Total, Europe	282	
		China	5	These were an English family.

R. L. ALEXANDER,
Dom. Gov. Travelling Immigration Agent.

CALGARY, 1st November, 1895.

No. 14.

REPORT OF THE MINNEDOSA AGENT.

(Mr. John Flesher.)

Minnedosa, Man., 1st November, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—I have the honour to report that the number of entries granted in this district during the first ten months of 1895 show a gratifying increase over those granted in the corresponding months of last year, and I have pleasure in stating that the settlers have been rewarded with an abundant harvest. During the spring and summer there was a most luxuriant growth and although some of the later crops have suffered from frost, the large yield will more than compensate for the injury caused thereby.

I have also pleasure in reporting the establishment of a number of creameries, which will prove a boon to the settlers and furnish them with a certain source of revenue.

Agricultural implements have largely reduced the hard work formerly devolving upon the farmers, and the creameries will relieve their wives of the laborious and ever recurring duty of churning.

Then too, many of the settlers had difficulty in providing proper dairying facilities, without which it is impossible to produce butter of good quality, but the creamery meets and overcomes this difficulty, and secures for its patrons the best price for the product of the cows. Similar benefits will result from the erection of cheese factories, the product of which realizes considerable money for the farmer. Within a short period upwards of 50,000 pounds of cheese have been shipped from this station. The number of cattle sold and shipped in this district is assuming large proportions. During the nine months ending 30th September upwards of 5,000 cattle were so sold and shipped.

It is apparent therefore, so far as this district is concerned, that our farmers no longer depend on the raising of wheat only, but by judicious mixed farming are achieving success.

I have the honour to be, sir,
Your obedient servant,

JOHN FLESHER,
Agent of Dominion Lands.

No. 15.

REPORT OF THE BRANDON AGENT.

(Mr. W. H. Hiam.)

Dominion Lands Office,
Brandon, 1st November, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—I have the honour to report that the number of immigrants who have registered at the immigration building at Brandon, during the past ten months, is very small, but I have no doubt there were many others who have settled in this district whose arrival was not thus recorded, and who went direct to their destination among former friends and relations.

There is universal rejoicing over the enormous crops with which our country has been blessed this year, and the immense yields of grain reported day after day will undoubtedly have the effect of stimulating immigration to Manitoba and the North-west in the near future.

The harvest excursions inaugurated by the Canadian Pacific Railway Company brought a vast addition to the help of our farmers, just when it was much needed, and proved most opportune, and must have resulted in mutual benefits to all concerned. It is understood that even a larger number of capable men could have found employment for a few months had they been available, as threshing will be continued so much later than usual, and in many localities there has been hardly any fall ploughing done. It is, therefore, reasonably certain that as soon as the land is in working condition next spring there will be more help required, but in view of the low price of grain and other products of the farm, it is obviously impossible to pay out much money for labour, because even after securing such a splendid crop as the present one, and after deducting incidental expenses in preparing and hauling it to market, the margin of actual profit is not large enough to warrant such outlays.

For the ten months ending on the 31st ultimo the number of homestead entries granted at this office was 243, being an increase of 43 as compared with the same period in 1894.

I have the honour to be, sir,
Your obedient servant,

W. H. HIAM,
Agent of Dominion Lands.

No. 16.

REPORT OF ACTING AGENT, LAKE DAUPHIN.

(Mr. Robert Gunne.)

Lake Dauphin, Manitoba, 1st November, 1895.

To H. H. Smith, Esq,
Commissioner of Dominion Lands, Winnipeg.

Sir,—I have the honour to submit my report for the past ten months.

The business of this office has increased very materially, so much so in fact that it was found necessary to procure the help of an assistant. The homestead entries granted during this time were 234, and land sales 3.

In view of the general interest which is now manifested in this portion of the province of Manitoba, many letters being received from Europe and the United States concerning it, I feel that a few remarks touching on the section in general will not be amiss.

The district possesses many marked advantages and is favoured by the possession of features of economic value that go to make a prosperous country, the only requisite now wanting being a larger population to develop its varied resources.

Timber fit for building and fuel is plentiful; there is an ample supply of hay; the country is well watered by rivers and streams having their source in the mountains, ensuring a steady supply of excellent water, which is a matter of great importance, particularly to those engaged in stock-raising, and the soil is of a richness hard to equal and impossible to surpass.

For the purpose of a brief comprehensive classification, the district might be divided into three parts, viz.:

Ochre River, including the country between the eastern boundary of the district and the first tier of townships west of lake Dauphin, which might be considered the grazing section; Dauphin, comprising that country between the Ochre river section and a line running parallel with the base of the Riding and Duck mountains, and distant about six miles from them, constituting and representing more particularly the agricultural portion; and Gilbert Plains, between the western limit of the Dauphin section and the Riding and Duck mountains, which might be looked upon as that part more especially adapted to mixed farming.

The essentials necessary to the carrying on of the different interests indicated above are all comprised within these divisions themselves, and their development will amply repay whoever is fortunate enough to acquire a possession in them. Settlers can purchase lumber for building purposes at very reasonable figures, say from $10 to $15 per thousand, there being five saw-mills in operation in the district, two at Ochre river, two at lake Dauphin, and one on the Gilbert plains, thus supplying the different points and their adjacent territory practically at the settlers' own doors.

There is a grist mill at lake Dauphin and a roller process mill in the course of erection at Ochre river. A fine quality of salt is being manufactured by Mr. Paul Wood on Red Deer point, lake Winnipegosis. He is, I understand, going more extensively into the business as soon as the transportation facilities warrant him in placing his manufacture in competition with the salt imported into the province.

The fishing industry, although as yet in its infancy, is bound to be a source of great importance commercially to the district. The lakes are well stocked with fish, and even with the present imperfect methods a very fair trade is carried on annually in this line,

supplying and benefiting the different settlements with a cheap article of food, a considerable quantity being also exported each winter, the practice being to haul the frozen fish by the sleigh load to some point on the railway for shipment. Whitefish is the principal variety and is the kind that is particularly dealt with.

The benefit to be derived from stock raising in conjunction with agriculture is becoming more and more recognized, and between $27,000 and $28,000 has been paid to the farmers and ranchers of this district by cattle buyers this season.

A considerable amount of surveying has been done this year, and I learn from the surveyors that the new townships laid out are all well adapted for settlement. It is to be hoped that during the next season all the remaining unsurveyed good land will be subdivided.

The crops this year have been unusually heavy. The yield per acre is greatly in advance of other years. The returns from threshing so far would indicate the average for wheat to be in the vicinity of 35 bushels to the acre, for oats, 55, and for barley 30.

In my last report I referred to the Fork river settlement. There is between the junction of the Fork with the Mossy rivers, and lake Winnipegosis, a settlement of between twenty and twenty-five families. From what I can learn they are well satisfied with their location, the land being well adapted for cattle raising or mixed farming.

On the 28th of May last I granted homestead entries to eight Canadians who had emigrated from Dakota after living there for several years.

There were also a considerable number from the same state in search of land during the summer, and several of them have squatted on unsurveyed land. Continued inquiries are being received from that and other states of the union for information concerning the district.

In conclusion, I cannot omit making mention of the necessity of a railway into these parts. The time has come when the products are far in excess of the local demand, and some means of carrying off the surplus is urgently required. At the present low price of grain, freighting of that commodity out of the settlement by wagon is out of the question. The same applies to the lumber trade, and likewise to every other industry that might be developed. The situation therefore resolves itself into this paradoxical position, that, although one of the richest, it is still the poorest, and unless facilities for transportation are afforded, the settlement will stagnate, settlers will leave and a general retrogressive movement set in.

I have the honour to be, sir,

Your obedient servant,

ROBERT GUNNE,

Acting Agent of Dominion Lands.

No. 17.

REPORT OF THE YORKTON AGENT.

(Mr. F. K. Herchmer.)

Dominion Lands Office,
Yorkton, Assiniboia, 31st October, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—I have the honour to report on the general result of immigration to this district during the past ten months.

The number of arrivals compares favourably with last year, though not as large as could be hoped for, and I trust that next season will show a marked increase, as the advantages of this district become more widely known, which must, I think, soon happen, in view of the number and superior quality of stock shipped each year, and of the fine dairy products which the district is sending out.

Of the new arrivals located during the period above mentioned, a large proportion were Hungarians, from Europe and the United States, who joined a colony of their friends, previously located in townships 23 and 24, ranges 5 and 6 west of 2nd meridian, where they have made good improvements, and show promise of being valuable settlers. Most of these people brought money, especially those direct from Hungary, and purchased for cash their outfit, and a number of horses and cattle, one having purchased an improved farm close to Yorkton.

Several more families are looked for this autumn, provision for their accommodation having been made by their friends; and the favourable reports of this year are expected to result in a still larger number coming in next year.

All the settlers located during the past season are of a superior class, and in the majority of cases have enough cash to establish themselves on a good footing.

The season has in the main been a favourable one, though early frosts damaged the wheat to a considerable extent, but as this crop is not largely depended on I do not think the pecuniary loss will be heavy. Crops of all other grains, as well as roots and vegetables have been most prolific, and judging from the magnificent exhibits at the fall shows more attention is being given each year to gardens.

Threshing is being carried on as fast as possible, but owing to the heavy crops most farmers have been somewhat delayed in stacking, and it is yet impossible to arrive at an average yield of the various crops, but the return will, no doubt, be heavy. And though the grain markets have opened at but low prices, a rise is hoped for before spring, and it is expected that all obligations on the part of farmers will be met.

Cattlemen here had a most successful year, last winter being very fine, and all classes of stock came through in fine condition, enabling beef animals to get fit for market earlier than usual; this, together with the marked absence of flies during the summer, resulted in the output being very choice, and commanding good prices, as high as 3 to 3½ cents per pound on foot having been paid for a number of steers.

Over 1,500 head of beef cattle were shipped for the English and Eastern Canadian markets from Yorkton alone, and the number from other railway points in the district would increase these figures very much. This cattle industry is increasing each year and, the quality being wonderfully improved, before long it will, I consider, be the main source of revenue.

Some horses have been sold, though the majority were for local use. A settler returning to England for the winter has bought up a car load of choice young heavy draught horses, which he takes for the English market, and should his venture turn out profitable it will be repeated next year.

Two car loads of sheep have been sent east from Yorkton, and there are a number still in farmers' hands fit for market which will no doubt find purchasers for the winter trade.

Some hogs have been sold for eastern markets, and numbers are being fatted for killing before the cold weather sets in.

Dairy interests have had better attention than in former years, a creamery in operation at Yorkton having manufactured a large quantity of very choice butter, something over twenty-seven tons, and this in a short season, as delay in building resulted in a late opening. Some 130 farmers contributed cream, covering a large area, and had a ready cash market for their output. This was preferable to the old system of home manufacture, and brought more money to the producer, as well as relieving the settlers' wives of a large amount of work.

This creamery will, without doubt, have a much larger output next year, having established a record for a superior article, and secured all the principal prizes and diplomas at the Regina exhibition.

Another in operation at Saltcoats was successful, but I have no figures or data from it.

Two cheese factories have turned out a considerable quantity of good cheese, though both were worked on a small scale this year, one at Saltcoats, the other at Tetlock Post Office. Next year they are expected to increase their capacity, as the returns have been profitable.

Considerable improvement in roads has been carried on, both as to grading and bridging in a substantial way the streams crossing the main trails, and all the settlements can now find easy access to the railway points and markets.

Prairie fires, so far, have done little or no damage, and the presence of a Mounted Police patrol will, no doubt, do much to suppress any that should start.

The health of the district, I am pleased to say, has been good, no epidemic having visited us.

I have the honour to be, sir,
Your obedient servant,

F. K. HERCHMER.
Agent of Dominion Lands.

No. 18.

REPORT OF THE ACTING AGENT AT ESTEVAN, ASSINIBOIA.

(Mr. A. E. Hetherington.)

Dominion Lands Office,
Estevan, 1st November, 1895.

The Commissioner of Dominion Lands,
Winnipeg, Man.

Sir,—In summing up the office work for the Coteau district for the ten months ending 31st October, it is necessary to take into consideration the great change that has taken place in the past few years as regards agricultural pursuits and the profits to be derived from the products of the farm.

The low prices obtainable for farm produce of all descriptions has had the effect of preventing a great many seeking to acquire land who would, under ordinary circumstances, have taken up homesteads and joined in farming operations. It was very unfortunate, and deeply to be regretted, that the advent of the excellent railway facilities now enjoyed by the southern and western portions of this district should have been followed by two seasons of extreme drought, not only here, but all over the greater part of the continent of North America. And what made it particularly felt in this newly settled portion of Eastern Assiniboia was the fact of the settlement being so new and ill prepared to stand the siege of two or three seasons which, in some cases, left absolutely nothing by way of crop to sustain the population that had so lately come in.

When I make the assertion that this district has suffered more than any other by reason of the dry season and depreciation in value of all farm produce, I mean, of course, this western portion of it adjacent to the Missouri Coteau, from which the district derives its name. I am convinced that had this portion of the district been populated, in ordinary wet seasons there is no land in the country more productive, or that will raise a fairer sample of the very best number one hard wheat. It only requires a little more experience on the part of the farmer, and a more thorough knowledge of the benefits to be derived from a deeper and better cultivation of the soil, to demonstrate the fact that this land is all right, and to bring to it a population that will make it one of the most flourishing and prosperous districts to be found in the whole North-west. It is already the most accessible by reason of its excellent railway facilities, the most easily worked on account of its easy undulating slopes and freedom from scrub, and withal the most healthy and invigorating by reason of its not too high altitude; and it is singularly free from summer frosts.

Some settlers have abandoned their claims during the past season owing to the difficulty experienced in procuring good water; but that hardship could be overcome with very little cost, if the territorial government would send here one of their well boring machines and make some tests in the different localities where the water supply has been particularly short. The water in the immediate vicinity of Estevan is of excellent quality, with an abundant supply obtainable at a depth of from 10 to 30 feet, but farmers some distance out complain of an insufficient supply.

The tendency of farmers throughout this whole country has been to try to do too much, and do it in a careless slipshod sort of way, and expect to reap an abundant harvest nevertheless; but if they could be brought more thoroughly to understand that "anything worth doing is worth doing well," they would always have a crop of some

kind and never an entire failure. I have heard some people remark that this country, especially this district, is a failure; but I am of the opinion that time will see this one of the fairest and most prosperous portions of our great North-west.

I know of individual crops threshed here this autumn averaging 35 bushels to the acre of wheat, of as fine a quality as could be found anywhere in the world.

Almost all of the immigration this year has been through, not to, Eastern Assiniboia, and for the most part to the country adjacent to the Calgary and Edmonton Railway.

I have had the honour of interviewing a great many of these people while passing through here, and I invariably find that they have some friends or former neighbours living there, and the favourable reports received from them regarding that beautiful portion of the North-west has been the means of inducing them, as it will hundreds of others, to leave the United States for that newer but fairer country.

I have the honour to be, sir,
Your obedient servant,

A. E. HETHERINGTON,
Acting Dominion Lands Agent

No. 19.

REPORT OF THE ACTING AGENT, REGINA, ASSINIBOIA.

(Mr. A. J. Fraser.)

Regina, 4th November, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—I have the honour to report that, during the ten months ending the 31st October, 1895, there has been a fairly large number of immigrants located, but not so large as we have every reason to anticipate during the coming year. Concerning the condition of the settlements already formed, I may state that in every locality large areas have been harvested, producing an extraordinary yield of superior quality of grain of all kinds, as well as an abundant supply of roots and vegetables of every variety.

Marked signs of improvement are observable everywhere, and indications of the settlers' prosperity and contentment are shown by their improved surroundings.

Foreign markets are being opened up, affording an avenue for the exportation of the settlers' grain, cattle, sheep, vegetables and dairy produce, and everything points to a prosperous future for the North-west Territories of Canada.

The large and flourishing German, Russian and Austrian colonies at Strassburg, Grenfell and Balgonie are making rapid strides of advancement in numbers, wealth and importance, and in nearly all the colonies named the settlers have expressed themselves, either personally or by letter, as being satisfied with the country, and preferring it to the countries from which they came.

The number of applications for homestead patents received during the period mentioned was 199; number of homestead entries granted, 166; number of sales, 10.

With reference to the trend that settlement has taken, I may say that it has principally been in an easterly direction, in range 7, in the neighbourhood of Grenfell colony.

The harvest, in every locality, has proved to be an abundant one, and this (though the prices are not as good as could be wished for) is inciting the settlers to greater energy, and is making them more hopeful and contented.

Go where you will—as far as the eye can reach—you will see clusters of large stacks of wheat, oats and barley, numbering from five or six up to twenty-five or thirty, at the home of each settler, and in every neighbourhood you will hear the busy hum of the "thresher."

Roots and vegetables of all kinds have produced an extraordinary yield, affording plenty for both man and beast.

This year, too, the settlers located in ranching districts, as well as those engaged in mixed farming, are reaping the reward of their industry, as their butter is being shipped to Toronto and other places, and car load after car load of their beef cattle is being transported to Montreal and other markets, and some direct to England.

I have the honour to be, sir,
Your obedient servant,

A. J. FRASER
Acting Agent of Dominion Lands.

No. 20.

REPORT OF THE AGENT AT PRINCE ALBERT, SASKATCHEWAN.

(Mr. John McTaggart.)

Prince Albert, 23rd October, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—There has been, I regret to say, a manifest decrease in immigration into this district during the current year. Those who came were mainly of French origin, and the trend of settlement has been to the neighbourhood of St. Louis de Langevin.

The crops, I am sorry to say, were not very encouraging, and may be characterized as a partial failure. This seems to have been due to summer frosts and drought. This failure, however, was chiefly confined to crops on old cultivation. Those on newly cultivated soil were, as a rule, fairly good, and in some instances very prolific. Instances have occurred of failure in one field, and luxuriance in an adjacent one, on the same farm. The season has been an exceptional one, and in respect of summer frosts and generally low temperature, it has differed from every other experienced by me during my eleven years' residence here.

I have the honour to be, sir,
Your obedient servant,

JNO. McTAGGART,
Agent of Dominion Lands.

No. 21.

REPORT OF THE BATTLEFORD AGENT.

(MR. E. BROKOVSKI.)

BATTLEFORD, 1st November, 1895.

The Commissioner of Dominion Lands,
Winnipeg, Man.

SIR,—There has been no increase of settlement in this district during the ten months ending 31st October, 1895.

Inquiries with respect to this locality still continue to be made, but the question of last season, as to its proximity to a railway, seems not to have lost its importance in the opinion of the inquirers.

It is with pleasure that I report this season's crops as excellent, for the areas sown. Had the spring supply of seed available here been more abundant a larger acreage would have been cropped than was the case.

The good yield at harvest time has given proof that the capabilities of the soil in this district when under fair cultivation are equal to those of localities nearer railway facilities.

In my report of last year your attention was called to the fact of the settlers here being in the possession of cattle to make up for the loss of crops. This year an export trade has been developed from the surplus of these herds. Some 1,600 head of grass-fed beef cattle and 900 sheep have been shipped and sold at good prices. This number does not include those purchased and slaughtered here for local consumption, estimated at about 500 more.

The condition of the animals as to appearance, weight and health, could not have been excelled anywhere in the Territories.

This district at no distant past date was dependent upon importation of cattle for local consumption of the settlers, and for filling of Government beef contracts. At the present time it can supply its own needs, satisfy contracts, and has a supply for export, without gravely depleting herds, which had originally been raised from the natural increase of the settlers' stock of cattle when he first located on his homestead.

The cattle masters here are fully alive to the further improvement of local stock and for this purpose some of them visited the recent Territorial exhibition, and there purchased thoroughbred and good grade stock for which they made a considerable cash outlay.

The Battleford district was not represented at this exhibition in produce or stock owing to circumstances beyond the control of its settlers.

The value of the exhibition as a territorial "object lesson" has been proven beyond doubt or dispute, and the few visitors from this vicinity took full advantage of it.

I have further pleasure in being able to report that there has been no case of want or necessity requiring relief of any kind, within this district. All persons able and willing to work have had constant employment at fair wages.

I may here state that the half-breeds of this vicinity during the past summer have generally employed themselves in digging seneca root. The quantity gathered and sold to the merchants here for export is stated to be 21,710 pounds, and the average price paid for it 13 cents per pound.

The recent destruction of some of the settlers' hay stacks by the too prevalent prairie fires has caused some present embarrassment to the persons affected, but I am informed that provision has been made—in some cases voluntarily offered by neighbours—for the wintering of the stock of the settlers so unluckily situated.

In this as in most cases of this nature care was not taken to minimize the danger, by proper and timely precautions.

I have the honour to be, sir,
Your obedient servant,
E. BROKOVSKI,
Agent of Dominion Lands.

No. 22.

REPORT OF THE AGENT AT LETHBRIDGE.

(Mr. W. H. Cottingham.)

Dominion Lands Office,
Lethbridge, Alberta, 30th October, 1895.

The Commissioner of Dominion Lands,
Winnipeg, Man.

Sir,—I have great pleasure in being able to report a marked improvement in land transactions for this district during the period covered by the last ten months. The entries for homesteads have nearly doubled the number made during the corresponding period of last year. The trend of settlement has been chiefly westerly, along the foot hills of the Rocky Mountains, the largest number of settlers coming from the States to the south of the international boundary. The past season has been a most favourable one for this district, as there were copious rain falls throughout the length and breadth of the district during the months of June and July; but, as stated in my last report, until the land can be irrigated, the raising of crops in this district as a whole must necessarily be precarious. In this connection I may state that the plans and specifications for seven irrigation ditches, in different parts of the district, have been recorded in this office during the past season. These ditches will all be operated next summer, and when the inestimable benefit to be derived therefrom is demonstrated, there is no doubt but that it will act as an incentive to others to put in ditches, and much land which is now lying waste, and unfit for cultivation, will be settled on, and through the means of irrigation transformed into veritable gardens.

Last winter was a most propitious one for stock, and the number of calves branded on the round up in the spring was largely in excess of anything as yet experienced on the ranges. The number of cattle also shipped from Lethbridge this year exceeds any previous season, the figures being as follows : cars, 355 ; cattle, 5,680. These cattle realized to the stockmen an average of $35 a head, so that at least $198,000 has been received by the stockmen at this point alone, and will eventually be distributed through the district. A large number of cattle and sheep were also shipped from Medicine Hat and Maple Creek. I am not, however, in a position to give figures, but it can be seen from the above what important proportions stock raising has already assumed in this district. The importation of cattle for fattening purposes was also inaugurated this season. Two trains of young stock have been brought from Manitoba, and I expect to see a much larger number brought in next summer.

Sheep farming, another important industry, has been in a flourishing condition during the past season. As an example of what may be accomplished in this line I may say that the Sarnia Ranching Company had last winter in the eastern part of the district 4,300 sheep; these were divided into two bands, to one band, consisting of 2,100 full-grown strong animals, no hay or other fodder was given, and the losses for the season amounted to three animals, and the increases to 1,750. The clipping of wool taken from this band averaged 7 lbs. per head, and from 287 picked sheep an average fleece of 9 lbs. of wool was taken. To the other band, consisting of 2,200 old sheep and lambs, about ten tons of hay was fed during the winter and spring. The losses in this band amounted to 35 animals. A large number of sheep have been exported from this district during the past season.

The manufacture of butter and cheese is also becoming an important factor in the prosperity of the district. Three creameries were established in the south-western portion last season, and run to their full capacity, their output being disposed of at satisfactory prices. 48,000 lbs. of cheese manufactured at Cardston was shipped from this station to British Columbia during the season.

The sowing of fall wheat is becoming general throughout those portions of this district where wheat is grown, and with satisfactory results. A field of ten acres in the vicinity of Pincher Creek sown in fall wheat produced this season 600 bushels, an average of 60 bushels to the acre, and in the same neighbourhood the least of three successive crops taken from one field has produced an average of 50 bushels of fall wheat to the acre.

Owing to the frequent rains already mentioned prairie fires have been conspicuous by their absence, only one serious fire having occurred so far this season. This was started by a teamster hauling hay, who lit a fire to prepare a meal, and through carelessness allowed it to get beyond control, and although he met an immediate punishment in the loss of a wagon, two sets of double harness, and about 30 tons of hay, he was arrested, tried, convicted, and fined $100, with the alternative of three months in jail. Such is the seriousness with which the starting of a prairie fire is regarded in this district.

Two mining locations have been recorded, both in Township 5, Range 1, west 4th Meridian, which are said to contain valuable deposits of manganese ore.

The unqualified success of the Territorial exhibition, held at Regina last September, was a pleasing surprise to many settlers in this district, and demonstrated to the world the great resources of this country in a manner which must have a beneficial effect on immigration.

In conclusion I may say that the settlers in this district, as a whole, have made fair progress during the past season, and are looking to the future with pleasant anticipations, and undiminished confidence in the country.

I have the honour to be, sir,
Your obedient servant,

W. H. COTTINGHAM,
Agent of Dominion Lands.

No. 23.

REPORT OF THE AGENT AT CALGARY.

(Mr. Amos Rowe.)

Dominion Lands Office,
Calgary, Alberta, 31st October, 1895.

To H. H. Smith, Esq.,
Commissioner of Dominion Lands,
Winnipeg.

Sir,—The immigration into Alberta during 1895 has not been as large as that of 1894, and the quality only fair; a few have some means, but a great many of the immigrants are very poor.

The settlement in this district this year, as in the case of last year, has directed itself chiefly to the five townships in the neighbourhood of the Calgary and Edmonton railway.

I am now quite convinced that Southern Alberta is far better adapted for ranching than for agricultural purposes, and that the farming portion is Northern Alberta, although this season, owing to the heavy continuous rainfall (until late in the autumn) the crops did not ripen, and were bitten by the frost in consequence. I am told though that the frost only went in streaks, and did not do as much harm as generally supposed; but I am inclined to believe it did a great deal of damage. One consolation however is that the farmers and ranchers have an abundance of green feed for stock.

The ranching business has been very satisfactory this year, the stock wintered well last winter, and during the summer months the grass was excellent. The shipments of cattle have been heavy all the summer and fall, and the prices very good, consequently the ranchers are all in very good circumstances, and a good feeling exists amongst them.

Quite a number of shipments of horses have been made at low prices, and in a short time all the good horses will be disposed of, as so many people have gone out of the horse breeding business. As soon as the people begin to realize that fact horses will go up in price. It would be a great thing for the country if those "scrubs" that are no use, and are eating up good prairie grass, could be got rid of in some way.

Sheep have done well this year, as they have for several years past, and the business is paying well, but it is a business that requires very close attention and does not suit every one.

I have the honour to be, sir,
Your obedient servant,

AMOS ROWE,
Agent of Dominion Lands.

No. 24.

REPORT OF THE AGENT AT RED DEER.

(Mr. J. G. Jessup.)

Red Deer, Alberta, November, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—I have the honour to report that there has been a marked decline in immigration into the Red Deer district during the ten months of the departmental year just ended, as compared with the corresponding period of the preceding year. Yet it is a matter for consolation that those settlers who have taken up homesteads appear to be of a better class, with more capital and a seeming greater determination to give the country a thorough trial. The trend of settlement has been chiefly to the north and north east, though considerable numbers have gone into the townships bordering upon Gull lake. I am glad to find that the suggestion thrown out by me in my last annual report as to the advisability of an immediate survey of these townships is being acted upon. The Icelandic colonly has not, so far as I can learn, suffered any diminution in its numbers, notwithstanding the fact that its labours during the last two seasons have not been well rewarded, in consequence of frosts. As heretofore, however, it manifests no symptoms of discontent with its circumstances, or the country as a settlement ground. The crops, it is to be regretted, are not on the whole satisfactory. Although the season was late, owing to cold winds and an absence of rain in the early part of it, everything promised well on into August, when, unhappily, a succession of severe frosts occurred, followed, in the beginning of September, by a snow-fall, both of which inflicted great, and in many cases, irreparable damage. The yield, as a result, has been so irregular and unequal that it is difficult to strike an average. But it may be stated generally that oats are at least twenty-five per cent below the crop of last year, and other cereals show a similar decrease. Roots however are, as a rule, good. Some of the specimens that were exhibited at the local fair held here last month were exceptionally fine. There is a noticeable disposition this year on the part of the farmers to render themselves independent of hay permits by growing on their own homesteads the fodder required for their stock. In almost every instance the results achieved have been in the highest degree satisfactory. The Rev. Leo Gaetz, to whose efforts towards the developement of its agricultural resources this district is largely indebted, informed me that last year he raised from thirteen acres over 100 tons of fodder; and other cases have been reported to me of an equally promising character, so that it is fair to assume that at no very distant period the troublesome and precarious system of the present will, to a large extent, be abandoned for the greater and more convenient certainty of home production.

I have the honour to be, sir,
Your obedient servant,

J. G. JESSUP,
Agent of Dominion Lands

No. 25.

REPORT OF THE AGENT AT EDMONTON.

(Mr. R. A. Ruttan.)

Dominion Lands Office,
Edmonton, Alberta, 31st October, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—I have the honour to submit my annual report for the departmental year ending 31st October, 1895.

The condition of settlement throughout my district is, on the whole, satisfactory. The area under crop has largely exceeded that of former years, and notwithstanding the unfavourable weather of May, early June, August and early September, the yield and quality of wheat and oats is turning out, as threshing returns show, better than was anticipated during harvest. In May and June the rain fall was much less than we are usually favoured with in this district, consequently the growth of grain was retarded at a critical time. In August and early September the rain fall was uncommonly copious and the temperature too low to favour quick ripening. These causes conspired to impair both the quality and quantity of the grain. It is believed that the grain sown last spring on fall ploughing was less injured by the spring drought than that sown on spring ploughing. Its growth during May and June was less affected by the drought. It is also commonly conceded that the crop yield on the higher and well drained lands exceeded in quantity and quality the yield of the lower and ill drained areas.

The net result in the grain crop, so far as it is possible to estimate it from the threshing returns, is a yield in quantity of from 18 to 20 bushels of wheat to the acre, 40 to 50 bushels of oats, and 35 to 40 bushels of barley. As to the quality it may be said that about one half of the entire product has escaped damage from frost, and one half is unfit for sale but is still useful as cattle fodder.

The root crop seems to have suffered to some extent, but the yield of potatoes and turnips, and roots generally, in the higher well drained areas, is up to the average : in the lower lands both quality and quantity of the root crop have been impaired.

Hail did some damage in the locality of Leduc, and during the present month prairie fires have occasioned serious loss to individuals in nearly every part of the district. Garden stuff is generally speaking below the average.

The hay crop is also short, but not in such a degree as is likely to prevent any of the farmers from securing a supply of fodder sufficient to winter their stock. The growing of green crops of hay and rye for fodder purposes is increasing year by year, and will with timothy, on favourably situated lands, grow more in favour as increasing settlement diminishes the area of hay lands. Oats and rye cut green will yield in a favourable season about three tons to the acre. It thus makes excellent fodder, being highly nutritive. Timothy is in this district an invariable success on favourably situated land, especially if it can be irrigated, or in seasons of abundant rainfall.

During the past six weeks the weather has been singularly warm and pleasant, which has enabled the farmers to complete their stacking and to proceed with their fall ploughing under very favourable conditions.

It seems to be unnecessary to specify particular communities or "colonies" in describing the present status of the settlers in this district. The natural conditions are pretty much the same throughout, and it may be said that in every instance in which a settler has adopted the proper methods he has been so far successful as to have

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established for himself a comfortable home and the certainty of adequate subsistence in the future. This achievement is open to any man, however poor, if he will lend his energies to the task and will adopt frugal and prudent practices, in the absence of which it must be difficult for him to succeed in any line of life. The natural conditions which prevail in Northern Alberta are conspicuously favourable to this achievement; the soil is everywhere excellent; coal, timber and water abundant; the climate, while variable, both healthy and propitious to farming operations. At present the exports from this district are confined to cattle, oats and butter, a small quantity of wool, furs and gold. It is hoped that as settlement increases and the yield of local wheat becomes sufficient to justify the establishment of mills, a large proportion of the flour for which a market exists in British Columbia, and in the export trade to China and Japan, will be manufactured here. The presence of coal in inexhaustible quantity makes this a most favourable situation for the establishment of other manufactories also. There is no reason why, for instance, coarse woollen goods should not be manufactured at this point, as the wool product increases. This will transpire in time. It is as well that the immigrant who contemplates settling here should be advised that for a few years to come he cannot reasonably expect to realize a high price for the staple grain products; but that he can safely rely on making a comfortable home for himself and family; that his only present contribution in the way of taxes is for school purposes, and that his cash outlay is restricted to the purchase of such groceries and clothing as he may find indispensable to his requirements. As to clothing, many of the Germans and South Russians spin their own yarn, and a few of them are said to weave cloth It would be well to take any means in our power to encourage this class of home industry.

Prairie and forest fires annually inflict great damage to the settlers and to the valuable timber of the district.

Their occurrence will, however, be less frequent as settlement increases and farmers adopt, individually, the methods of protection which are best calculated to check the evil. Already several districts are paying systematic attention to this work, ploughing fire breaks alongside the travelled roads, &c. As the number of these roads increases, and the settlers awake to the vital importance of safeguarding them in this manner, we may hope for an abatement of these fires. Two or three days ploughing by every settler in the district would at present make his individual possessions safe from fire, but the conviction that this measure of protection is really indispensable seems to make way very slowly, considering the peril in which the community stands by the neglect of precautionary measures. The remedy is one the individual only can provide. So far as the North-west Council could assist it has done so by enacting ordinances dealing with the matter One of these ordinances provides for the erection of "fire districts" to enable communities to take the larger measures toward protection which it is beyond the ability of the individual to apply.

The most useful pamphlet which has been supplied me for distribution is that entitled "The Settlers Guide" or the "Homesteader's Handy Helper." It is greatly in demand among the residents of the district and highly approved by them. They make use of the information which it affords and prefer it to any other for transmission to friends abroad.

The lands surrounding Edmonton for a distance of 30 miles or more have been for the most part entered for, and it is advisable to bring under survey as soon as practicable townships to the west, as far, say, as range 4 west of the 5th meridian (inclusive) and up to and including township 59. I would also recommend the subdivision of the townships in the Beaver hills.

I have the honour to be, sir,
Your obedient servant,

R. A. RUTTAN,
Agent of Dominion Lands.

No. 26.

REPORT OF THE KAMLOOPS AGENT.

(Mr. E. A. Nash.)

Dominion Lands Office,
Kamloops, B.C., 1st November, 1895.

The Commissioner of Dominion Lands,
Winnipeg.

Sir,—I have the honour to report as follows for ten months of the departmental year ended the 31st ultimo.

Direct immigration from the old country has not been great into this district, though many settlers filter in through Eastern Canada and the United States. From the latter country letters of inquiry are constantly received and answered as fully as possible. One of the chief difficulties is to have ready any considsrable area of surveyed land to which I can direct strangers. Nearly all the agricultural land is taken up as soon as surveyed, and frequently in advance.

Owing to the nature of the country and the increased work caused by the many old provincial claims within the railway belt the progress of the survey is slow, the more so as there is only one party of surveyors to do the work of the two British Columbia agencies.

The season has been a favourable one, as regards crops and stock, and the latter is now in excellent condition to withstand the winter.

I have the honour to be, sir,
Your obedient servant,

E. A. NASH,
Agent of Dominion Lands.

No. 27.

EXTRACTS FROM THE REPORT OF THE NEW WESTMINSTER AGENT.

(Mr. John McKenzie.)

Dominion Lands Office,
New Westminster, B.C., 2nd November, 1895.

"The volume of correspondence at this agency has been larger during the first ten months of 1895 than during the same period in the preceding year—letters of inquiry from all parts on the subject of immigration forming a good percentage.

"The passage of the Order in Council of the 11th July last, reintroducing the homestead regulations, under which settlers may acquire title at $1.00 per acre, will cause all the foot hills and broken lands to be taken up for various purposes—fruit growing, poultry raising and mixed farming. Already there has been a renewal of activity in the examination of the different parts of the Fraser valley. And as the nature of the climate and the best means of utilizing all the advantages, and of meeting the disadvantages shall be studied and understood, there will be an increase in the population and in the industries followed.

"A beginning has been made in the shipment of fruit to the North-west and Manitoba, and it is felt that the market will be a good one.

"More care is being bestowed on the orchards—young and old—so that the fruit may be of a good marketable quality.

"There is also more attention given to the drainage of the land for all purposes, that the cold rains of winter may not lodge, and thus prevent the warm rains of spring from having their proper effect in the growth of all crops.

"A large addition has been made to the area of cleared land this year, as the fall has been dry.

"The operation of dyking the low lands has been constantly maintained throughout the year; and a good beginning has been made in utilizing the parts already reclaimed. The work is costly, but it shows the confidence of the people in the value of the soil, and the future of the markets of the province.

"The depression in business is gradually passing away and the farmers generally are more hopeful—although low prices for many of the products have ruled during the year. The fishing and lumbering industries are being pushed vigorously and the result has been very encouraging. It is advisable, however, that people contemplating to move to the province should first obtain as much definite information as possible by writing to the agencies of the districts and take a little time to consider the questions that arise in their minds in the making of a choice of location."

PART V

ROCKY MOUNTAINS PARK

ROCKY MOUNTAINS PARK.

BANFF, 18th October, 1895.

The Hon. T. MAYNE DALY,
Minister of the Interior, Ottawa.

SIR,—I have the honour to forward the following report of the operations carried on in the Rocky Mountains Park since the end of October, 1894.

ROADS.

The work on the roads consisted altogether of repairs. No new roads were projected or opened. During the winter months a few men were required occasionally in clearing snow drifts, and in the spring the usual repairs to ditches and culverts, and from rockslides, had to be attended to.

On the sides of these roads a considerable amount of clearing up was done, such as extracting stumps and other unsightly objects. Much of this, and other refuse matter, left from previous years, was burnt up while the ground was still damp from the spring snow and rains.

The guard-wall at the junction of the Bow and Spray rivers, which protects the road, was also repaired, having been slightly injured by the freshet of the previous spring. Some repairs were also made on Mountain Avenue, which is, more than any other, exposed to rock and snow slides.

During your visit to the West in the month of August, a petition from the people of Anthracite was sent you asking for some remedy for the difficulties they laboured under in consequence of the freshets which took place the year before, by which the bridges built by the North-west Government had been destroyed, thereby cutting off to some extent their connection with Banff and Canmore.

In accordance with your instructions I erected a temporary bridge at Anthracite over the Cascade river, and improved the approaches thereto, so as to connect the mines with the road to Banff, and by this means relieve the public of the dangers attending the trip to and from Banff by what is known as the "Old Road."

Your instructions further required me to consult with the Canadian Pacific Railway authorities, and the Anthracite coal company, with a view to making some more permanent arrangement whereby the roads and property generally might be protected from further floods and freshets, as the work now done was for the purpose of meeting an immediate contingency. I am now in communication with these parties with a hope that no time may be lost in carrying out some plan that will meet the necessities of the case.

The whole valley of the Cascade river at Anthracite is of such a treacherous, shifting nature, and subject to such violent and sudden fluctuations of the stream, that nothing but a thoroughly devised system of cribwork will meet the exigencies, and prevent the periodical destruction of bridges and other structures on the townsite of Anthracite.

The temporary bridge built there this autumn is of the cheapest character to meet an immediate want, and is not calculated to resist a more than ordinary spring freshet, and between now and next spring it is hoped that a proper system of protecting crib work may be carried out and the more permanent work completed. In the meantime the present bridge answers well the purpose intended.

The road leading out of Anthracite towards Canmore ("Tote Road") had been destroyed by the diversion of the Cascade river by the railway company last year, and, being rendered useless for traffic, a new road was laid out by the coal company on the north side of the railway track. This road leads along the track of the dry channel of the stream that had been diverted, and will make an excellent road if the river is prevented from finding its way into its original course. But if it is not so prevented, this road will undoubtedly be submerged at high water and the work done there by the coal company will be lost.

The whole question therefore of the roads in this portion of the park will require special and careful consideration. No part of the park appropriation has yet been laid out in that direction, and indeed the small amount available from the appropriation would be lost if not supplemented by sufficient money to make the work complete and, permanent.

THE FLOODS.

The river in the park this last spring did not attain to more than their normal height and consequently no damage was done of any account. Any damages to the roads from this cause were of minor character and require no special mention.

FIRES.

The spring was late and the frequent showers of snow and rain prevented the possibility of any local fires. Although other parts of the mountains suffered much from forest fires, and much smoke reached this locality, still the park was completely exempt during this season.

HAY CROP.

The hay meadows yielded their usual average crop which was as heretofore given to the person offering the highest tender.

VISITORS.

In consequence of this report being made at an earlier date than usual, the returns of the numbers of visitors as taken from the hotel registers are for only eleven months instead of for twelve months, as usual. But notwithstanding this, the total number of visitors for the eleven months exceed that for the twelve months of last year by nearly two hundred; and besides this, the number of visitors who did not register at the hotels, and who of course are not included in the accompanying tables, was much greater than usual.

THE MUSEUM.

As stated in my last annual report the work on the museum building was sufficiently advanced to enable me to place the glass cases therein, ready for the reception of the exhibits, which were to be sent from the Geological Survey Department at Ottawa. These exhibits arrived here in February, and were placed in the cases as soon as possible afterwards.

They consisted of the following specimens:—

Specimens of	Birds	259
" "	Animals	8
" "	Woods	57
" "	Plants	814
" "	Minerals	201
	Total	1,339

This constitutes a very fair beginning to the museum, and it is hoped that another year will add much to its present attractions.

The room set apart in the building for the library will be furnished with the geological reports, maps, &c., of the Dominion, and the botanical cabinet and catalogue of the plants of the mountains will be easy of access for persons using this room, for taking notes, making reports, &c.

A table of the number of persons who visited the museum is appended which shows how much it is appreciated, and what an addition it is to the other attractions of the park. About two hundred persons per month have inspected the exhibits during the short time the building has been open.

There is still room for many more specimens, and it is hoped that each year will see many additions to the exhibits.

The grounds about the building will be improved by walks, and tree and shrub planting, in the future.

The painting which has been suspended on account of the weather will be completed next year.

TOURISTS AND SPORTSMEN.

The many attractions afforded by the mountains for the tourist and sportsman are fast becoming known.

Each year brings additional numbers of gentlemen who spend the summer months —for the pure love of adventure—in exploring the several passes and scaling the mountain peaks. Many come from the United States, and, by making Banff their headquarters, explore the mountains for hundreds of miles in all directions.

Numbers of these persons are not satisfied with a mere cursory examination of the country covered by their trip, but they carry on as well a rough survey of the region passed over, and on their return at the end of the season produce very useful maps and reports of their summer's work, which are usually published in some scientific publication in England or the United States. These are matters of the greatest importance not only to the park but to Canada generally, and should receive every encouragement. It is satisfactory to know that a good commencement has been made, and that persons who wish to devote their time to the exploration of the mountains can do so to the best advantage by making their way to Banff direct, where they will be in a position to not only get full information regarding the best means of attaining their object, but can be supplied with all the necessary outfit for their journey, including careful and reliable guides.

To encourage enterprise of this description every reasonable assistance should be afforded persons who desire to spend their time and money in this way. To do this it will be necessary to extend the several bridle roads now leading out from Banff, but which terminate at the present limits of the park, beyond which no part of the appropriation can be expended without further legislation.

I have the honour to be, sir,
Your obedient servant,
GEO. A. STEWART,
Superintendent.

ROCKY MOUNTAINS PARK.

MAXIMUM and Minimum Temperatures and the general state of the Weather between 4th November, 1894, and 13th October, 1895.

Date.	Thermometer Readings. Maximum. 6 a.m.	Maximum. 6 p.m.	Minimum. 6 a.m.	Minimum. 6 p.m.	Weather.
1894.	°	°	°	°	
Nov. 4.	29·8	33·8	12·2	10·0	Fair.
" 5.	35·0	39·0	29·0	29·0	Cloudy, rain and snow.
" 6.	38·2	39·2	33·0	33·0	Cloudy.
" 7.	30·0	38·0	26·2	26·2	Fair.
" 8.	40·0	39·0	34·0	24·0	"
" 9.	24·0	34·0	16·5	16·5	"
" 10.	39·2	46·2	33·2	33·2	"
" 11.	55·2	56·0	45·0	45·0	"
" 25.	29·0	31·0	20·0	20·0	Cloudy.
" 26.	25·5	28·2	20·5	20·5	Fair.
" 27.	23·5	18·0	— 6·5	— 6·5	"
" 28.	21 2	38·0	14·8	14·8	"
" 29.	33·2	35·0	28·0	28·0	"
" 30.	31·5	27·7	14·2	14·2	" (Aurora.)
Dec. 1.	21·0	22·0	— 5·5	— 5·5	" "
" 2.	15·5	17·8	— 0·5	— 0·5	"
" 3.	8·5	15·0	2·0	2·0	"
" 4.	20·5	29·0	10·5	10·5	"
" 5.	32·5	32·8	27·8	27·8	"
" 6.	34·5	34·5	26·0	14·8	"
" 7.	14·8	15·2	— 3·5	— 3·5	"
" 8.	14·5	27·0	8·0	8·0	Cloudy, snow.
" 9.	20·2	16·0	10·0	8·5	Fair.
" 10.	14·8	27·0	5·0	5·0	"
" 11.	27·8	30·0	24·8	24·8	"
" 12.	32·5	33·0	23·0	19 5	"
" 13.	41·2	43·0	30·0	30·0	Cloudy.
" 14.	41·2	32·2	29·8	26·0	"
" 15.	26·8	22·0	7·0	7·0	Fair.
" 16.	20·2	21·0	16·5	14·8	"
" 17.	17·1	22·0	5·0	5·0	"
" 18.	23·0	29·5	15·0	15·0	"
" 19.	29·8	32·2	21·5	21·5	"
" 20.	30·8	21·8	7·8	7·8	"
" 21.	15·1	26·2	4·8	4·8	"
" 22.	23·1	22·5	7·0	7·0	"
" 23.	24·8	30·0	19·0	19·0	Cloudy, snow.
" 24.	26·8	17·8	10·8	10 8	Fair.
" 25.	15·6	15·5	5·8	5·8	"
" 26.	14·8	1·0	— 8·2	— 8·2	"
" 27.	— 4·5	9·0	—12·7	—12·7	"
" 28.	2·8	13·8	—14·5	—14·5	"
" 29.	13·8	10·0	— 3·2	— 3·2	"
" 30.	2·6	13·2	—13·7	—13·7	Fair.
" 31.	8·6	3·0	—10·3	—11·4	"
1895.					
Jan. 1.	— 0·6	7·2	—13·4	—13·4	"
" 2.	6·5	3·0	1·2	—13·0	"
" 3.	—13·0	— 6·5	—31·8	—32·8	"
" 4.	5·6	6·2	— 7·0	— 7·0	Cloudy, snow.
" 5.	2·0	11·2	— 2·5	— 2·5	" "
" 6.	1·8	— 5·0	— 7·2	—11·5	" heavy squalls.
" 7.	—11·5	17·2	—25·4	—25·4	Fair, very squally.

Date.	Thermometer Readings. Maximum. 6 a.m.	Maximum. 6 p.m.	Minimum. 6 a.m.	Minimum. 6 p.m.	Weather.
1895.	°	°	°	°	
Jan. 8.	21·8	22·8	17·0	17·0	Cloudy, heavy squalls.
" 9.	26·1	37·2	22·8	22·8	Fair, very heavy squalls.
" 10.	35·0	32·5	32·5	13·1	Cloudy, snow.
" 11.	31·4	44·8	5·0	5·0	"
" 12.	42·0	42·5	34·5	34·5	Fair.
" 13.	38·2	41·2	29·0	29·0	Cloudy, snow.
" 14.	20·0	31·1	10·0	10·0	Fair.
" 15.	15·6	2·2	— 7·5	—11·2	"
" 16.	— 2·7	2·0	—22·9	—24·9	"
" 17.	— 3·5	6·1	— 5·2	— 5·2	Cloudy.
" 18.	8·0	7·0	— 1·0	— 4·7	Fair.
" 19.	4·5	6·5	— 4·7	— 4·7	"
" 20.	4·5	16·0	— 8·5	— 9·2	"
" 21.	15·1	20·0	— 6·0	— 6·0	"
" 22.	20·0	19·0	— 4·5	— 6·2	"
" 23.	19·0	19·2	—11·0	—11·2	"
" 24.	12·6	10·8	— 5·2	— 5·2	"
" 25.	7·0	21·0	— 3·5	— 4·2	" snow.
" 26.	17·8	15·6	15·5	10·0	"
" 27.	10·0	19·5	—12·0	—13·0	" snow.
" 28.	18·8	23·8	11·8	11·8	Cloudy.
" 29.	23·8	27·8	10·0	8·5	"
" 30.	27·8	24·8	14·8	14·8	" heavy gales of wind.
" 31.	19·8	2·0	— 6·5	—16·8	Fair.
Feb. 1.	15·8	21·5	— 1·0	— 1·0	Cloudy, snow.
" 2.	10·0	2·0	— 1·0	— 3·0	" "
" 3.	— 0·2	0·2	— 3·2	— 3·2	" "
" 4.	— 1·5	33·0	— 8·0	— 8·0	"
" 5.	31·1	— 1·5	— 1·5	—13·5	"
" 6.	—13·5	14·8	—34·6	—35·4	Fair.
" 7.	14·8	24·0	5·0	3·0	"
" 8.	13·8	23·8	— 2·0	— 2·0	" snow.
" 9.	20·8	15·0	—10·0	—11·0	Cloudy.
" 10.	13·8	10·0	— 9·0	— 9·0	Fair.
" 11.	.....	13·6	—19·0	—20·0	"
" 12.	3.0	11·5	—16·0	—17·2	"
" 13.	6·8	10·8	—22·0	—25·2	"
" 14.	— 1·0	24·0	—17·7	—19·2	"
" 15.	21·8	31·0	7·0	7·0	Cloudy.
" 16.	29·8	33·0	24·0	24·0	"
" 17.	31·8	33·0	24·8	24·8	"
" 18.	31·1	36·9	29·0	29·0	"
" 19.	38·8	39·2	32·2	31·0	" sleet.
" 20.	36·2	33·0	26·8	19·0	Fair.
" 21.	27·1	30·0	— 1·0	— 2·0	"
" 22.	30·4	40·2	24·0	24·0	"
" 23.	39·2	45·2	34·2	34·2	"
" 24.	41·2	44·0	35·5	35·5	"
" 25.	40·0	44·0	19·4	19·0	"
" 26.	41·0	45·2	38·0	37·5	"
" 27.	43·7	40·2	37·5	33·0	Cloudy, snow.
" 28.	33·0	33·5	18·4	17·0	Fair.
Mar. 1.	31·4	35·5	11·8	11·0	"
" 2.	34·0	23·2	22·6	20·8	Cloudy.
" 3.	23·2	30·8	— 2·5	— 2·5	Fair.

MAXIMUM and Minimum Temperatures, &c.—*Continued.*

Date.	Thermometer Readings.				Weather.
	Maximum.		Minimum.		
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1895.	°	°	°	°	
Mar. 4.	30·8	34·0	21·4	20·5	Fair.
" 5.	29·8	33·0	7·0	7 0	"
" 6.	29·6	38·5	5·5	5·5	"
" 7.	37·2	44·0	27·0	27·0	"
" 8.	41·2	46·0	21·8	21·2	"
" 9.	41·5	26·5	21·8	19·8	Cloudy.
" 10.	19·8	37·8	12·8	12·8	"
" 11.	36·0	18·0	12·4	12·0	"
" 12.	15·0	12·8	2·2	1·5	Fair.
" 13.	9·4	20·8	—14·0	—14·2	"
" 14.	16·8	28·0	—11·5	—11·5	"
" 15.	22·8	22·8	— 1·3	— 2·0	"
" 16.	19·6	30·0	— 0·4	— 0·4	"
" 17.	19·8	36·0	16·4	16·4	"
" 18.	33·0	41·5	7·8	7·5	"
" 19.	37·5	42·0	32·0	32·0	"
" 20.	37·5	40·5	34·0	31·1	Cloudy, snow.
" 21.	31·5	34·0	23·8	23·0	" "
" 22.	31·1	34·0	14·0	14·0	" "
" 23.	27·8	33·0	12·0	12·0	" "
" 24.	25·6	31·5	6·0	6·0	Fair.
" 25.	27·1	45·0	12·0	12·0	"
" 26.	43·2	41·0	32·0	31·4	Cloudy, snow and rain.
" 27.	31·4	43·0	28·0	28·0	Cloudy, snow and rain.
" 28.	38·2	47·0	34·2	32·2	Fair.
" 29.	33·2	40·0	22·2	22·2	"
" 30.	33·0	42·8	18·8	18·8	"
" 31.	40·0	50·0	23·5	23·5	"
Apr. 1.	47·0	54·5	23·8	23·8	"
" 2.	53·0	46·0	31·0	31·0	"
" 3.	38·2	45·0	29·0	29·0	"
" 4.	38·0	31·0	25·0	25·0	Cloudy, snow.
" 5.	28·0	38·0	16·5	16·5	Fair.
" 6.	34·0	34·0	20·5	20 5	"
" 14.	43·0	43·2	28·2	27·0	Fair, snow.
" 15.	33·2	47·5	31·0	31·0	Fair.
" 16.	42·2	52·1	34·0	34·0	Cloudy, rain.
" 17.	35·2	37·0	26·5	26·5	Fair, light snow
" 18.	35 0	39·0	29·5	29·0	" "
" 19.	36·2	37·8	27·2	27·2	Cloudy, snow.
" 20.	36·0	47·2	18·5	18·5	Fair.
" 21.	44·2	55·0	27·0	27·0	"
" 22.	53·8	60·2	29·8	29·8	"
" 23.	59·5	59·0	39·5	39·5	"
" 24.	53·7	45·2	30·0	30·0	"
" 25.	42·2	31·8	29·8	29·8	Cloudy, light snow.
" 26.	31·8	40·0	28·0	28·0	Cloudy, snow.
" 27.	37·7	56·0	26·0	26·0	Fair.
" 28.	56·0	60·2	28·0	28·0	Cloudy.
" 29.	58·2	58·0	40·0	40·0	Fair.
" 30.	52·1	61·0	27·0	27·0	"
May 1.	60·0	64·2	33·0	33·0	"
" 2.	59·8	64·4	34·0	34·0	"
" 3.	57·5	57·0	33·8	33 8	"
" 4.	49·0	55·0	32·5	32·5	"
" 26.	55·2	57·2	43·0	43·0	Cloudy, rain.
" 27.	54·0	50·8	39·0	39·0	"
" 28.	41·0	54·8	34·0	34·0	Cloudy.
" 29.	54·0	54·8	27·0	27·0	Fair.

Date.	Thermometer Readings.				Weather.
	Maximum.		Minimum.		
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1895.	°	°	°	°	
May 30.	51·2	54·0	33·0	33·0	Fair.
" 31.	49·2	51·0	28·5	28·5	"
June 1.	47·0	50·0	30·0	30·0	Cloudy, rain.
" 2.	48·2	62·2	32·0	32·0	Fair.
" 3.	61·6	67·4	28·5	28·5	"
" 4.	61·2	64·2	40·0	40·0	"
" 5.	60·0	64·4	36·0	36·0	"
" 6.	56·0	55·2	33·5	33·5	Cloudy, rain and snow.
" 7.	46·0	53·5	36·0	36·0	Cloudy, rain.
" 8.	52·0	63·8	28·8	28·8	Fair.
" 9.	60·0	67·0	27·5	27·5	"
" 10.	64 0	70·5	33·0	33·0	"
" 11.	69·0	61·0	44·0	44·0	"
" 12.	54·0	57·5	29·0	45·5	Fair, rain.
" 13.	54·0	59·0	34·0	34·0	Cloudy, rain.
" 14.	50·0	46·0	33·0	33·0	Cloudy, snow and rain.
" 15.	41·2	46·5	32·5	32·5	" "
" 16.	46·5	57·8	31·0	31·0	Fair.
" 17.	57·5	59·0	35·0	35·0	"
" 18.	56·2	59·8	34·0	34·0	"
" 19.	54·0	65·2	32·2	32·2	"
" 20.	64·8	65·4	37·8	37·8	"
" 21.	60·8	64·2	37·5	37·5	"
" 22.	62·0	67 0	48·0	48·0	"
" 23.	61·0	66·5	47·5	47·5	Fair, rain.
" 24.	58·0	60·8	36·0	36·0	Fair.
" 25.	59·0	70·0	32·0	32·0	"
" 26.	65·0	66·5	36·0	36·0	Fair, rain.
" 27.	65 0	77·7	33·5	33·5	Fair.
" 28.	76·0	83·7	36·0	36·0	"
" 29.	81·0	86·0	39·0	39·0	"
" 30.	84 0	70·2	38·0	38·0	Fair, light rain.
July 1.	66·0	65·2	51·0	51·0	"
" 2.	66·0	65·2	43·0	43·0	Cloudy.
" 3.	64·2	68·0	51·0	51·0	Fair, rain.
" 4.	57·0	63·7	46·5	46·5	Cloudy, rain.
" 5.	62·6	57·8	49·5	49·5	"
" 6.	57·0	53·0	45·0	45·0	"
" 7.	50·5	60·0	42·2	42·2	"
" 8.	57·0	65·2	37·0	37·0	Fair, rain.
" 9.	64·0	71·0	37·8	37·8	Fair. Forest fires west. Much smoke.
" 10.	66·0	74·2	40·5	40·5	Fair.
" 11.	66·8	77·2	39·2	39·2	Fair, very much smoke.
" 12.	75·0	78·5	43·0	43·0	Fair.
" 13.	76·0	73·2	43·2	43·2	Fair, rain.
" 14.	73·2	68·7	42·8	42·8	Fair.
" 15.	66·4	67·2	41·0	41·0	"
" 16.	64·0	62·2	36·0	36·0	Fair, rain.
" 17.	50·0	52·5	35·0	35·0	Cloudy, rain.
" 18.	52·2	60·8	36·5	36·5	Fair.
" 19.	56·0	59·0	41·5	41·5	Fair, slight rain.
" 20.	58·0	60·0	40·0	40·0	Cloudy.
" 21.	59·0	69·0	33·8	33·8	Fair.
" 22.	65·6	75·0	38·5	38·5	"
" 23.	74·0	80·4	36·8	36·8	"
" 24.	74·0	77·2	40·8	40·8	" rain.

MAXIMUM and Minimum Temperatures, &c.—*Concluded.*

Date.	Thermometer Readings.				Weather.
	Maximum.		Minimum.		
	6 a.m.	6 p.m.	6 a.m.	6 p.m,	
1895.	°	°	°	°	
July 25.	64·0	71·2	41·5	41·5	Fair.
" 26.	64·0	71·0	37·5	37·5	"
" 27.	70·1	69·4	37·0	37·0	"
" 28.	69·4	69·2	37·0	37·0	"
" 29.	66·0	75·8	40·5	40·5	"
" 30.	70·2	73·2	45·0	45·0	"
" 31.	67·8	73·4	45·0	45·0	" light rain.
Aug. 1.	64·0	78·0	45·0	45·0	"
" 2.	77·2	81·0	40·0	40·0	"
" 3.	80·4	76·2	44·0	44·0	"
" 4.	80·4	73·0	48·0	48·0	"
" 5.	71·0	80·2	41·0	41·0	"
" 6.	79·0	80·4	41·2	41·2	"
" 7.	80·2	59·0	47·5	47·5	Cloudy, rain.
" 8.	55·8	49·2	38·0	38·0	"
" 9.	49·0	65·7	30·5	30 5	Fair.
" 10.	62·2	70·4	30·0	30·0	"
" 11.	67·4	75·2	38·5	38·5	Fair, smoke from forest fires west.
" 12.	70·2	64·2	48·0	48·0	Cloudy, rain.
" 13.	49·7	56·2	30·5	30·5	Fair.
" 14.	56·0	70·2	34·0	34·0	"
" 15.	68·2	67·7	44·0	44·0	"
" 16.	60·0	67·2	30·0	30·0	"
" 17.	64·2	59·2	31·8	31·8	"
" 18.	58·8	69·7	36·2	36·2	Fair, smoke from forest fires, west.
" 19.	66·6	73·4	33·0	33·0	Cloudy, very much smoke.
" 20.	71·6	66·4	36·0	36·0	Cloudy, rain.
" 21.	67·4	63 7	46·0	46·0	Fair.
" 22.	61·6	61·0	39·8	39·8	Cloudy, rain.
" 23.	57·0	67·2	47·5	47·5	Fair.
" 24.	61·2	63·2	54·5	54·5	" light rain.
" 25.	61.2	50·2	40·0	40·0	Cloudy, rain.
" 26.	44·7	60·5	36·0	36·0	Fair.
" 27.	60·0	67·2	28·0	28·0	Cloudy.
" 28.	64·8	73·2	33·0	33·0	Fair.
" 29.	71·0	67·7	34·8	34·8	" light rain.
" 30.	55·8	70·2	47·0	47·0	"
" 31.	66·4	73·4	38·5	38·5	Fair, slight smoke from forest fires, west.
Sept. 1.	70·4	74·2	38·5	38·5	Fair, slight smoke, forest fires west.
Sept. 2.	70·0	65·0	37·0	37·0	Cloudy, thunderstorm.
" 3.	50·2	44·8	33·5	33·5	Cloudy, rain.
" 4.	43·0	47·8	32·0	32·0	Cloudy, rain and snow.
" 5.	40·2	39·2	30 0	30·0	Cloudy, snow.
" 6.	36·8	43·2	30·5	30·5	Cloudy, light snow.
" 7.	41·2	44·5	27·8	27·8	Cloudy, light rain.
" 8.	40·0	46 8	33·5	33·5	Cloudy, rain.
" 9.	41·5	45·0	29·8	29·8	" snow.
" 10.	41·0	47·8	29·5	29·5	Fair.
" 11.	45 5	49·8	25·0	25·0	Cloudy, light rain.
" 12.	49·2	43·2	35·0	35·0	Cloudy, rain.
" 13.	41·5	50 0	33 5	33·5	"
" 14.	44·5	49·0	37·2	37·2	"
" 15.	45·0	52·5	39·0	39·0	Fair.
" 16.	49.2	54·2	29·5	29·5	Cloudy, rain.
" 17.	46·2	53·8	43·8	43·8	" lightrain
" 18.	52·2	57·0	46·2	46·2	Fair, rain and snow.
" 19.	53·2	33·2	29·0	29·0	Cloudy, snow.
" 20.	29·2	36·0	23·5	23·5	Cloudy.
" 21.	32·2	40 0	13·5	13·5	Fair.
" 22.	36·8	45·2	32·2	32·2	Cloudy.
" 23.	42·7	50·8	37·2	37·2	" rain.
" 24.	47·2	47·0	40·0	40·0	Cloudy, rain, snow & sleet.
" 25.	42·2	43·2	32·2	32·2	Cloudy, hail.
" 26.	38·5	46·0	23·2	23·2	Fair, snow and sleet.
" 27.	40·0	47·0	32·0	32·0	Fair.
" 28.	42·7	53·5	21·0	21·0	"
" 29.	44·5	61·0	27·0	27·0	"
" 30.	57·0	60·0	33·8	33·8	"
Oct. 1.	52·2	59·2	27·0	27·0	" rain.
" 2.	53·8	48·2	36·2	36·2	Cloudy, rain.
" 3.	44·7	51·8	27·8	27·8	Fair.
" 4.	49·2	62·7	28·2	28·2	"
" 5.	55·2	58·8	40·8	40·8	" light rain
" 6.	48·5	43·2	34·5	34·5	"
" 7.	35·5	53·5	22·5	22·5	"
" 8.	43·2	57·5	26·5	26·5	"
" 9.	52·8	52·2	38·0	38·0	Cloudy, rain.
" 10.	48·7	51·0	42·2	42·2	Cloudy.
" 11.	51·0	59·8	48·0	48·0	Fair.
" 12.	59·0	49·8	49·5	37·2	"
" 13.	37·8	50·2	26·8	26·8	"

G. McLEOD.
Observer.

Department of the Interior.

CANADIAN PACIFIC HOTEL, BANFF.

Visitors from 1st of May to 1st of October, 1895.

From where.	Number.
Canada	297
United States	940
England	207
Ireland	10
Scotland	26
Germany	14
Sweden	4
New South Wales	4
Australia	25
China	58
Japan	25
India	20
New Zealand	8
France	9
South Africa	1
Palestine	5
Sandwich Islands	9
West Indies	2
Bermuda	1
	1,665

SANITARIUM.

Visitors from 1st November, 1894, to 1st October, 1895, eleven months.

From where.	Number.
Canada	2,142
United States	215
England	60
Ireland	1
Scotland	8
Wales	1
Australia	16
New Zealand	2
Tasmania	3
India	2
China	24
Germany	7
France	2
Sandwich Islands	2
Italy	2
Sweden	1
Japan	4
Fiji Islands	5
Denmark	3
	2,500

GRAND VIEW HOTEL.

VISITORS from 1st November, 1894, to 1st October, 1895, eleven months.

From where.	Number.
Canada	328
United States	25
England	13
Ireland	2
Australia	2
New Zealand	2
Sandwich Islands	1
	373

BEATTIES' HOTEL, HOT SPRINGS.

VISITORS from 1st November, 1894, to 1st October, 1895, eleven months.

From where.	Number.
Canada	352
United States	18
England	9
Ireland	4
Australia	2
Germany	1
	386

CAVE AND BASIN.

NUMBER of persons registered from the 1st November, 1894, to 14th October, 1895.

From where.	Number.
Canada	1,588
United States	718
England	217
Scotland	19
Ireland	23
India	15
Australia	31
China	49
France	20
Japan	15
Germany	4
	2,699

Department of the Interior.

MUSEUM.

NUMBER of visitors from 1st July to the 10th October, 1895.

From where.	Number.
Canada	375
United States	165
England	45
Scotland	15
India	3
China	15
Japan	5
Australia	10
Sandwich Islands	12
Germany	9
France	7
	661

EXPENDITURE ON WORKS.

FROM 1st November, 1894, to 1st October, 1895.

On What Expended.	Amount.
	$ cts.
Roads	934 69
Waterworks	165 00
Museum	205 20
Cemetery	42 87
Clearing land	125 07
Contingencies	373 76
	1,846 59

PART VI

NORTH-WEST TERRITORIES

Department of the Interior.

REPORT CONCERNING THE ADMINISTRATION OF THE NORTH WEST TERRITORIES FOR THE YEAR 1895.

LIEUTENANT GOVERNOR'S OFFICE,
REGINA, N.W.T., 16th December, 1895.

To The Honourable T. MAYNE DALY,
Minister of the Interior, Ottawa.

SIR,—I have the honour of submitting a report concerning the administration of the North-west Territories for the year 1895.

CROPS.

A noticeable improvement in the condition of agricultural communities has been observable, live stock being in demand at very fair prices, while the bounteous harvest throughout the Territories has created a feeling of hopefulness and contentment. I regret to say that the wheat in some portions of Northern Alberta was damaged by frost. The sale of cattle at good prices increased fully one-third over last year, while the noticeable increase in products known as mixed or concentrated farm commodities is extremely promising.

TERRITORIAL EXHIBITION.

The recent Canadian North-west Territorial Exhibition was remarkably successful, having proved the vast resources of the various provisional districts, the vigour and industry of our farming population, and their ability to compete with the world in all things appertaining to intelligent husbandry. The entries in the various classes were double the number anticipated, and every provisional district manifested patriotic interest in the enterprise. The stock parade was admittedly the finest ever made in any part of the Dominion, and this was given emphasis to by the fact that most of the herds of cattle were disposed of at good prices to prominent buyers. His Excellency the Governor General, after opening the exhibition, remained for three days, the result being a written expression of his opinion, from which I make the following extract:—

"It would be difficult to over-estimate the advantages, direct and indirect, which may accrue from the successful carrying out of such a display of the capabilities of the vast districts which have been represented at the exhibition, and from the incentive and encouragement that is thus offered to all who are interested in their development. Your Honour and your friends will always have the satisfaction of feeling that you, and those who have assisted you in this work, have given a definite impulse to the increased recognition by the inhabitants of the Territories of the important fact that they are not, as it were, scattered units, but that they are bound together by common interests and aims, with all the great possibilities which may be attained by judicious co-operation and combined action."

The presence on this occasion of Sir Mackenzie Bowell, Premier of the Dominion, was greatly appreciated.

The committee had arranged to accommodate entries for between 3,000 and 4,000 exhibits, but ten days before the exhibition opened it became apparent that almost double the building capacity would be requisite. Removed from any large business centre where it would have been possible to engage employees and workmen generally, it was deemed advisable to assume the responsibility of meeting the emergency as best we could; hence, builders and mechanics worked overtime; fast freight was arranged to

convey tents and other requisites, and the advisory committee was thus able to protect all exhibits, and to ask His Excellency the Earl of Aberdeen, Governor General of Canada, to open the first Canadian North-west Territorial Exhibition promptly at 2 o'clock on Tuesday the 30th of July. The total number of entries in the various classes was as follows:—

Horses	505
Cattle	712
Sheep	557
Swine	373
Poultry	1,007
Rabbits	32
Dairy products	684
Field grains, &c.	400
Roots and vegetables	1,319
Plants and flowers	370
Canary birds	14
Bees and honey	7
Manufactures, Manitoba and N.W.T	122
Fruits, preserves, etc	154
Leather and leather work	27
Preserved meats and fish	8
Ladies' work	774
Fine arts	334
Natural history	64
School work	246
Indian products	85
Total	7,794

A comparison of the entries in cattle, sheep, swine, &c., at Regina, and at the large eastern exhibitions, established for many years, is certainly significant, demonstrating, as it does, the great resources of this at present sparsely populated country.

1895.	Horses.	Cattle.	Sheep.	Swine.
Regina	505	712	557	373
Winnipeg	281	338	289	141
Montreal	582	903	361	322
Ottawa	254	408	201	112
Toronto	1,259	720	487	435

Much of the stock was disposed of to buyers, the exhibition proving a significant object lesson to the hundreds of strangers who examined the various departments.

IRRIGATION.

Irrigation, authorized by the Dominion Act of 1894, has proved extremely useful in portions of Alberta, where a large number of ditches have been cut, splendid results following.

The ventures already made have established conclusively that the system is extremely advantageous, and will, doubtless, lead to more important works of the kind. One hundred and twenty are now in operation.

INSANE PATIENTS.

The total number of insane patients at present confined in the Selkirk and Brandon asylums, Manitoba, under arrangements with the Manitoba government by a Dominion Order in Council, is eighty-three. The number committed for 1895 reached twenty, and the number discharged twenty-one.

The present arrangements between the Dominion and Manitoba governments will expire in January, 1898, when it may be deemed wiser that the Territories should assume responsibility for this service.

DEAF MUTES.

With reference to the care of deaf mutes of the North-west Territories, an amount was put in the estimates for such service; but, a misunderstanding having arisen with reference to the length of time of the proposed contract, a delay occurred, and the subject has been considered by the executive committee.

There are now, it is stated, between twenty-six and thirty deaf mutes in the Territories. I can only express a hope that some remedy may soon be supplied.

MAGISTRACY.

The Dominion Parliament having amended the North-west Territories Act, a re-organization of the magistracy will be necessary. With this in view, a carefully prepared digest of magisterial procedure is being prepared, and I can but hope that the policy to be adopted may add to the efficiency, respectability and trustworthiness of this very important body. In this connection I have deemed it wise to reduce the number of magistrates and as far as possible to appoint them upon the recommendation of the Judges of the Supreme Court.

The following were appointed:

Dr. H. C. Wilson	Edmonton	Alberta
W. T. Livock	Edmonton	do
Dr. J. G. Hardy	Cannington	Assiniboia

TERRITORIAL SCHOOLS.

The number of schools,—which may be considered a fair index to the country's welfare—has noticeably increased. On the 2nd August, 1894, there were 330 public schools; 2 Protestant separate schools; 35 Roman Catholic Public Schools, and 10 Roman Catholic separate schools. At the present time there are 395 public schools; 2 Protestant separate schools; 44 Roman Catholic public schools, and 11 Roman Catholic separate schools.

The number of pupils in August, 1894, was 8,926; and in August, 1895, is estimated at 10,003. Since August, 1894, further school debentures have been issued and registered to the amount of $46,700.00. In addition to this, permission has been granted to several districts to issue debentures to the amount of $25,600.00. The total debenture responsibility at the present time does not exceed $185,350.00, representing virtually the debt of the Territories.

COMMISSIONERS FOR TAKING AFFIDAVITS.

Consequent upon the policy of reducing the number of magistrates, a large number of commissioners for taking affidavits have been appointed, as follows:

Name.	Address.	
J. W. Jewett	Regina	Assiniboia.
J. MacIntosh	Shell River	Saskatchewan.
J. Dreaver	Snake Plain	do
T. F. Macfarlane	Battleford	do
J. Carney	Onion Lake	do
J. Poitras	Battleford	do
J. B. Mercer	Battleford	do
T. E. Mahaffy	Battleford	do
Henry Hyde	Fairlight	Assiniboia.
A. A. Latreille	Lac Marguerite	do
A. Newhands	Edinburgh	Scotland.
F. C. Mercer	Edmonton	Alberta
G. E. Immerson	Stony Plain	do
Thomas Daly	South Edmonton	do
R. McMillan	Wetaskiwin	do
A. C. Newson	Fish Creek	do
G. A. Reid	Lacombe	do
J. D. Hanafin	Prince Albert	Saskatchewan.
A. McRae	Dewdney	Alberta.
W. C. Gillis	Pakan	do
D. McLean	Edna	do
W. Jamieson	Welwyn	Assiniboia.
O. B. Fysh	Moose Jaw	do
J. Dobbin	Regina	do
R. K. Thomson	Boharm	do
J. H. Grayson	Moose Jaw	do
G. F. Salmon	Riga	do
A. J. Fraser	Regina	do
R. A. Wallace	High River	Alberta.
F. Binnie	Longlaketon	Assiniboia
R. J. Gwynne	Grenfell	do
Wm. Toole	Calgary	Alberta.
J. A. Calder	Calgary	do
A. L. Fernie	Theodore	Assiniboia.
Samuel Goodacre	Yorkton	do
J. A. MacIntyre	Duck Lake	Saskatchewan.
Chas. Fisher	Duck Lake	do
W. S. Urton	Duck Lake	do
D. J. O'Keefe	Saltcoats	Assiniboia.
J. Stewart	Prince Albert	Saskatchewan.
Chas. LeSage	Sandy Lake	do
Jas. Lauder	Craven	Assiniboia.
Hy. Rowsom	Regina	do
Andrew Wood	Gainsboro	do
T. Bennett	Edmonton	Alberta.
C. S. Lott	Calgary	do
T. T. Thompson	Moosomin	Assiniboia.
J. K. Welsh	Indian Head	do
T. W. Coleman	Pincher Creek	Alberta.
Duke Barker	Clumber	Assiniboia.
J. L. McDonald	Stony Plain	Alberta.
A. G. Randall	Edmonton	do
G. W. Gairdner	St. Albert	do

Names.	Addresses.	
F. Clark	Dundurn	Assiniboia.
J. J. McGee	Ottawa	Ontario.
H. B. Round	Edmonton	Alberta.
Chas. Eyre	Yorkton	Assiniboia.
J. B. Braman	New York	U.S.A.
Wm. Wilkie	South Edmonton	Alberta.
Thomas Laidlaw	Rothbury	Assiniboia.
T. H. Morris	Theodore	do

Issuers of Marriage Licenses.

The following were appointed :—

W. C. Gillis	Edmonton	Alberta.
J. C. Gordon	Manewan	do
H. E. Irwin	Agricola	do
Edward Carey	Edna	do
P. Mohr	Fort Saskatchewan	do
F. W. Fane	Beaver Lake	do
A. H. R. Bastien	Rocanville	Assiniboia.
Benjamin Burke	Gainsboro	do
M. H. King	Estevan	do
R. J. Steel	Regina	do
F. J. Peacock	Banff	Alberta.

Advocates.

The following were enrolled :—

D. MacGillivray	Prince Albert	Saskatchewan
Jas. Balfour	Regina	Assiniboia.
A. M. Parker	Regina	do
A. C. Rutherford	Edmonton	Alberta.
E. D. H. Wilkins	Calgary	do
C. E. Smith	Calgary	do
J. Short	Calgary	do
H. W. R. Moore	Calgary	do

Coroners.

The following were appointed :—

C. W. Hunt	Indian Head	Assiniboia.
C. E. Smyth	Wolseley	do

STATUTE LABOUR AND FIRE DISTRICTS.

The following is the number erected in the different Provisional Districts :—

Assiniboia	4
Alberta	14
Saskatchewan	0
Total	18

Liquor Permits.

The following is a list of all liquor permits issued during the year :—

RETURN of Special Permissions for the importation of intoxicating liquors into the North-west Territories during the Year 1895, as required by 49 Victoria, Chapter 50, Section 93.

Permits.	Quantity in galls. of each Intoxicant in each Permit.						Total Quantities.						Remarks.
	Whiskey.	Brandy.	Wine.	Gin.	Rum.	Alcohol.	Whiskey.	Brandy.	Wine.	Gin.	Rum.	Alcohol.	
1	1	.....	.....	.....	.....	.....	1	.....	...	.....	...	.....	
7	2	.....	.....	...	.	.....	14	.....	...	...	.....	. ...	
6	5	.....	.....	.....	.....	...	30	.....	.....	.	.....	.....	
1	1	2	.....	.....	.....	.....	1	2	.....	.....	.....	.....	
4	2	2	.....	.....	.....	.....	8	8	.....	.....	..	.....	
1	5	5	.....	.....	.....	.....	5	5	.....	.....	.....	.....	
1	2	1	1	.....	... .	.....	2	1	1	.....	.....	. .	
1	2	.....	2	. ...	.	.....	2	.....	2	...	...	.....	
1	6	..	.....	.....	1	.....	6	.....	.....	.....	1	.....	
2	. ...	1	.....	... .	.....	.....	.....	2	.....	..	.....	.....	
12	.....	2	.....	.....	.. ...	. ..	.....	24	.....	.....	... ..	.....	
1	.....	3	.....	....	...	.. ..	....	3	.....	.....	.....	.....	
1	. . .	4	.	. ....	.....	.....	....	4	.....	.....	.....	.....	
1	.....	1	.....	.. ..	2	.....	.....	1	.....	.....	2	.....	
1	....	2	1	...	.....	.. .	....	2	1	....	.....	.....	
1	.. .	2	2	.....	.....	.....	.....	2	2	.....	.....	.....	
1	.....	2	. ...	.....	3	5	...	2	..	.. ..	3	5	
6	.....	.....	2	...	.....	.....	.....	.	12	....	.....	.....	
1	.....	.....	.....	1	.....	.....	. ...	...	.....	1	.. ..	.....	
3	.....	.....	...	.. ..	2	. ..	.....	.....	.....	.....	6	..	
5	.....	.....	.....	..	.	2	...	.....	.....	... .	... ..	10	.
.....	....	....	1	.....	.....	.....	...	..	1	.....	.....	...	Sacramental
1	.....	....	5	....	....	.....	.....	.....	5	.....	.....	... .	do
3	...	.....	10	.....	. . .	....	.....	.....	30	...	.....	... .	do
62	....	.....	...	.....	.....	....	69	56	54	1	12	15	

RECAPITULATION.

	Galls.
Spirits—	
Whiskey	69
Brandy	56
Wine	18
Gin	1
Rum	12
Alcohol	15
	171
Wine (sacramental)	36
Total	207

Department of the Interior.

LEGISLATURE.

The Assembly was called together on August 29 and prorogued on September 30. The following Ordinances were passed :—

An Ordinance for granting to the Lieutenant-Governor certain sums of money to defray the expenses of the publice service of the Territories for the twelve months ending 31st August, one thousand eight hundred and ninety-six, and for other purposes relating thereto.

An Ordinance respecting commissioners to make enquiries concerning public matters.

An Ordinance to repeal Ordinance No. 12, of 1892, intituled: "An Ordinance respecting the Veterinary Profession."

An Ordinance to repeal Ordinance No. 2 of 1893, intituled: "An Ordinance respecting Revenue and Expenditure."

An Ordinance to amend chapter 5 of the Revised Ordinances, 1888, intituled: "An Ordinance respecting Controverted Elections."

An Ordinance to amend chapter 15 of the Revised Ordinances, 1888, intituled: "An Ordinance respecting Stallions."

An Ordinance to further amend the Judicature Ordinance.

An Ordinace to amend and consolidate as amended the law relating to mortgages and sales of personal property.

An Ordinance to amend and consolidate as amended the law respecting the Legal Profession.

An Ordinance to amend and consolidate as amended the Ordinances respecting Deputy Clerks and Deputy Sheriffs.

An Ordinance respecting the Legislative Assembly of the Territories.

An Ordinauce respecting Veterinary Surgeons.

An Ordinance to provide for the better auditing of the Public Accounts of the Territories.

An Ordinance respecting Alimony.

An Ordinance to amend Ordinance No. 8 of 1893, intituled: "The Game Ordinance."

An Ordinance to provide for the investigation of accidents by fire.

An Ordinance respecting villages.

An Ordinance respecting stock injured by railway trains.

An Ordinance to further amend Ordinance No. 20 of 1892, intituled: "An Ordinance respecting Agricultural Societies."

An Ordinance to amend and consolidate as amended the Statute Labour and Fire District Ordinances.

An Ordinance to further amend Chapter 29 of the Revised Ordinances, 1888, intituled: "An Ordinance respecting marriages."

An Ordinance to amend and consolidate as amended the Ordinances respecting bulls.

An Ordinance to amend Ordinance No. 19 of 1894, intituled: "An Ordinance respecting stray animals."

An Ordinance respecting threshers' liens.

An Ordinance to amend "The Municipal Ordinance."

An Ordinance respecting masters and servants.

An Ordinance to amend Ordinance No. 7 of 1892, intituled: "An Ordinance respecting the assessment of railways."

An Ordinance to further amend "The Liquor License Ordinance, 1891-92."

An Ordinance to amend Ordinance No. 22 of 1890, intituled "The Calgary General Hospital Ordinance."

An Ordinance to amend Ordinance No. 27 of 1889, intituled: "The Medicine Hat General Hospital Ordinance."

An Ordinance to incorporate the Catholic Parishes and Missions in the Diocese of St. Albert.

An Ordinance to legalize bylaw No. 6 of the "School District of the Town of Moose Jaw Protestant Public School District, No. 1 of the North-west Territories" and proceedings thereunder, and to change the corporate name of the said District.

An Ordinance respecting the incorporation of subordinate lodges of the Grand Lodge of Manitoba Ancient Free and Accepted Masons.

An Ordinance respecting the exemption of Wapella flour mill property from school taxation.

An Ordinance to amend Ordinance No. 22 of 1894, intituled: "An Ordinance to provide for aiding the construction of the Wolseley and Fort Qu'Appelle Railway."

Bill (No. 29) intituled: "An Ordinance to amend and consolidate as amended the ordinances respecting schools" was reserved.

CENSUS.

The general census of the Territories, taken by order of the Dominion Government early in the year, shows a gratifying increase of population throughout the various provisional districts since 1891, proving that marked progress is being made, while at the same time the class of settlers is such as will promote practical development of our resources.

YUKON.

In June last Inspector Constantine of the North-west Mounted Police force, with twenty men, left for the Yukon, where there has been a noticeable increase in population consequent upon gold discoveries. Upon representations made, it was decided to issue two permits to the trading companies doing business in that country, subject to the inspection of Mr. Constantine.

On the 29th day of August last I had the honour of formally opening the Lady Aberdeen Woman's Hospital at Medicine Hat, under the auspices of the Woman's Hospital Aid Society.

The Maternity Cottage is a handsome stone building, and will be a valuable addition to the General Hospital. These, with the institutions at Calgary, Lethbridge and Edmonton, will doubtless prove of great public benefit.

I have the honour to be, sir,

Your obedient servant,

C. H. MACKINTOSH,

Lieutenant-Governor of the North-west Territories.

Department of the Interior.

PART VII.

REPORT OF THE LIEUTENANT-GOVERNOR OF KEEWATIN

REPORT OF THE LIEUTENANT GOVERNOR OF KEEWATIN.

GOVERNMENT HOUSE, WINNIPEG, 29th August, 1895.

The Honourable T. MAYNE DALY,
Minister of the Interior, Ottawa.

SIR,—As my administration of the affairs of the district of Keewatin closes with the present month, and my several reports throughout the year upon special matters which in my opinion called for comment will have informed you upon general subjects, I shall in this final report deal only with the administration of justice in the district, the measures taken for the enforcement of those clauses of the Keewatin Act which relate to intoxicants, the urgently needed re-arrangement of the boundaries of the district, the protection of its food fishes, sea animals and those of the land which are of so much value for the furs they supply, or as food for the scattered population of this vast district.

In considering just now the condition of the inhabitants of the district, it is with no ordinary feeling of satisfaction and gratitude that He who rules should have permitted my administration of seven years to close without a single crime of a serious character having been committed throughout its great extent, and almost an entire absence of slight offences. I cannot refrain in this connection from again acknowledging the value of the aid afforded me in rigidly enforcing the law regarding intoxicants, whether by justices of the peace with power to summarily deal with the offenders, or by those exercising that strong influence which is in the hands of the devoted missionaries of the district, or by those who as dealers in its furs possess a knowledge of the language of the natives, which gives them a wide and an effectual influence when exercised in the knowledge of the utter destruction by this cause of whatever comfort there is in Indian life, and the destruction in one orgy of the mission efforts of many months. Hence my desire to take this occasion to accord to the unpaid magistracy of the district, the devoted clergymen in charge of its missions, and Hudson's Bay Company's officers and others that meed of praise which is due them for aiding the success of measures which have been blessed by the almost unparalleled absence of crime to which I have alluded, and which has been largely consequent upon the impossibility of obtaining the materials for intoxication.

Exclusion of intoxicants has thus rendered the administration of justice a comparatively easy matter, while the knowledge of the appliances in various parts of the district for the capture and detention of any criminal has aided materially the tact and good judgment of the justices in promoting that respect for the law which now obtains.

With reference to the food supply of the district, as I have from time to time dealt extensively with this subject in special reports, I need only now say that as a rule the inland fish (whitefish and lake trout) continue to supply the wants of the Crees (Swampy) and others; and that so far as I have heard of the more eastern Chippewyans, the barren ground cariboo continue to supply their wants, excepting where the deer from causes as yet unknown, suddenly desert the runways of years for distant northern or southern ones; an event which always causes the greatest suffering. The Swampy Crees have been and are still forced away from the shores of Hudson's Bay for inland fishing and hunting, yet local attachments are stronger even with these Indians of the wood than their brethren of the plain, and the Swampy Cree is no exception, and every year passes through periods of semi-starvation consequent upon the almost complete denudation of sea animal life from the Hudson's Bay littoral, by those who for so many years wintered in Canadian Bay harbours, trangressing our laws relating to Indians, defrauding our revenue and often demoralizing Indians whom the missionary has sought under circumstances of peril, privation and exposures to lead into a better life.

While upon this subject of the food supply of our more northern aboriginal inhabitants I have been watching with much interest the experiment now being carried on by the United States government on the west coast of Alaska near the Arctic Circle, to meet an exigency which was present with the natives of that region as it will in time come to us unless preventive measures are taken. The sealers and whalers of that part of the Alaskan coast have killed off the sea animals upon which, while still part of Russia, the Eskimo and Eskimo Coast Indian mixtures had lived in plenty, and annual starvation was the result. Attention having been called to this condition the United States government feeling that the natural food supply could not possibly be restored, and that the Siberian tribes of the opposite coast were in comparative comfort from having herds of domesticated reindeer, humanely directed the establishment of an experimental station on a deep bay near the Arctic Circle, and stocked this establishment with a number of domesticated deer brought from the Siberian coast, in charge, the first year, of Siberian herders. In view of my extensive report to you upon this subject, I need only add that up to the latest advices the experiment has been a success. Eskimo herders have taken the place of the Siberian ones who have returned to their own country; the moss and lichens of that rude coast have been found even better than those on the Siberian shore; the animals have been successfully reared and trained for the purposes of fast travel and for slower draught purposes, and the proposed distribution of a band of forty to each of the more northern mission stations will probably take place next spring. The Eskimo have taken a keen interest in the success of the experiment, and to these herdsmen are promised herds of ten as a nucleus when the central herds will bear the distribution.

In our case, with hundreds of thousands of these animals wild, whose habitat is to the south and west of the Eskimo, and the east and north of the Chippewyans of the Great Mackenzie basin lakes, only training in domestication would be necessary; and with a view to interest missionaries and others in the subject I have procured from Lapland all the appliances in the way of sledges, ski, staff, harness, &c., which would answer for models for those who for mission, trading or other purposes, live in latitudes favourable to this hardy, tractable, useful, clothing, and meat-supplying animal, known to us as the Barren ground cariboo, but which is the true reindeer of the European and Asiatic Russian Arctic coast.

I need not further remark on re-arrangement of boundaries further than to say that the south-eastern one of Keewatin is so obvious as to need no comment, and its western boundary must have that extension westward which was a couple of years ago agreed upon if full maintenance of prohibition of intoxicants is to obtain; or what would cover the same ground and still further extend the benefits of Keewatin administration, a division of the immense region between Eastern Keewatin and Athabaska, and above Athabaska to British Columbia and Alaska, into several large territories, over which the Keewatin Act, or some legislative enactment based upon its wise provisions, should obtain.

I have pointed out in former reports where I thought non-treaty Indians, driven by want from the sea-shore, should be induced to settle. Later information, as well as a careful study of the whole subject, satisfied me that I was right, for reasons therein given at length, in recommending the head waters of certain rivers, whose richness of soil, as evinced by the presence of deciduous trees, fishing lakes, the presence of deer and furbearing animals, and a locality where their services as boatmen can be turned to account, make it a region peculiarly suitable to the wants of those who are, though untreated with, still the wards of the government.

I have the honour to be, sir,
Your obedient servant,

JOHN SCHULTZ,
Lieutenant-Governor of Keewatin.

SUMMARY REPORT

OF THE

GEOLOGICAL SURVEY DEPARTMENT

FOR THE YEAR

1895

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY
1896

[No. 13*a*—1896.] *Price* 10 *cents.*

Geological Survey Department.

To His Excellency the Right Honourable the Earl of Aberdeen, Governor General of Canada, &c., &c., &c.

MAY IT PLEASE YOUR EXCELLENCY:—

The undersigned has the honour to lay before Your Excellency, in compliance with 53 Vic., Chap. 2, Section 6, the Summary Report of the Proceedings of the Geological Survey Department for the year ending 31st December, 1895.

Respectfully submitted,

T. MAYNE DALY,
Minister of the Interior.

JANUARY, 1896.

SUMMARY REPORT

OF THE

GEOLOGICAL SURVEY DEPARTMENT

FOR THE YEAR 1895.

OTTAWA, 1st January, 1896.

The Honourable T. MAYNE DALY, M.P.,
Minister of the Interior.

SIR,—In accordance with the provisions of the Act of Parliament relating to the Geological Survey, I have the honour to submit this Summary Report of the Department for the calendar year 1895. The reduced appropriation made by Parliament for the work of the Geological Survey during the fiscal year 1895-96, has rendered a strict economy necessary. This has particularly affected the nature and amount of the field-work undertaken, for the existence of a number of unpublished reports and maps resulting from the work of previous years, appeared to render it desirable that a considerable proportion of the money actually available should be devoted to printing. The members of the staff, without exception, have, however, exerted themselves to make the best possible use of the means placed at their disposal, and the progress made in 1895 has been satisfactory and important, as the succeeding pages of this report will, I believe, show.

Annual Reports.

During the year, volume VI. of the new series of Annual Reports of the Survey, has been completed and issued. The volume is a small one, of but 534 pages, but as the funds available for the fiscal year 1894-95 did not admit of further printing, it was deemed advisable to give to the public the matter already in type. The printing of volume VII. is now in progress, and it is hoped that this volume also may shortly be ready for publication.

Maps published during the year.

Twenty-six maps have been issued during the past year, including fourteen sheets of the geological map of Nova Scotia on the scale of one mile to an inch, and one sheet on the scale of four miles to an inch; nine plans and one section relating to the auriferous creeks of the Cariboo

district in British Columbia; the north-east quarter-sheet of the "Eastern Townships" map, Quebec; the Rainy River and Seine River sheets in western Ontario. A number of the maps above mentioned had been engraved and printed previous to January 1st, 1895, but had not been distributed. Of the Seine River sheet, a small preliminary edition only has so far been printed, in advance of the forthcoming report on the district, and subject to correction in detail. This course was adopted in order to render the results of surveys immediately useful to prospectors and miners engaged in discovering and developing the gold-bearing veins of the district. This preliminary map has been available since October, although part of the field-work included by it was actually carried out during the past summer.

In addition to the maps above mentioned, two of the Kamloops district, one of the Omenica and Finlay region in British Columbia, and five relating to the surface geology of New Brunswick have been printed and are ready to appear with volume VII.

Other publications.

Other publications include part II. of volume III., Palæozoic Fossils, 84 pages, with 9 plates, and part I. of volume II., Contributions to Canadian Palæontology, 66 pages, with 5 plates. The latter had been printed in separate sheets at different times previous to 1895. A new list of the publications of the Geological Survey of Canada from the beginning of the work, in 1843, to date, making a pamphlet of 52 pages, has also been prepared and printed. This list has been very carefully revised throughout, and now includes no less than 479 official publications (including all maps, plans, etc.) besides a large number of scientific papers bearing upon the work of the Survey or the collections in the museum, of which copies are held on sale for the convenience of the public.

General index.

In order to facilitate reference to the various reports of the Survey, Mr. D. B. Dowling has now been for some months engaged in the preparation of a classified index to the reports published subsequent to the Geology of Canada (1863), which it is proposed to print when completed. The volume prepared by Sir William Logan, under the above title, forms a synopsis of the results of the Survey to the time of its publication; and the collective indexing of subsequent reports may be regarded as a first step towards the production of further synoptical reports.

Mineral specimens sent to Imperial Institute.

In pursuance of the policy of making known to purchasers and consumers, such special products of Canadian mines as find their market at a distance, letters were sent to the various producers of mica in the autumn of 1894, and at a later date to pro

ducers of asbestus in Canada, inviting them to send commercial samples and price-lists for transmission by the Geological Survey to the museum of the Imperial Institute in London. This invitation was well responded to in both instances, and the series of representative specimens obtained have during the year been placed on exhibition by the curator of the Canadian Section of the Institute, Mr. Harrison Watson. Brief descriptions of the character and mode of occurrence of the minerals were at the same time furnished for insertion in the technical journals, with special reference to the specimens shown, and many inquiries and requests for further particulars and addresses, have since been received both by the Geological Survey and the several exhibitors.

Photographic Exhibition.

In response to an invitation to participate in the special Exhibition of Photography in its application to the Arts, Sciences and Industries, in London, a number of large coloured and framed photographs of geological features and mines, illustrating the use of photography in connection with the work of the Survey, were prepared and transmitted. These photographs where taken and coloured after nature by Mr. H. Topley.

Geographical Congress.

To represent the work of the Geological Survey at the exhibition of the International Geographical Congress, also held in London during the past summer, a typical series of the various classes of maps published by the Survey was mounted and sent to that exhibition.

Both the photographs and maps above referred to, were at the close of the respective exhibitions handed over to the Canadian Section of the Imperial Institute, where they are now permanently displayed.

Educational collections of minerals.

Another subsidiary, though not unimportant feature of the work, to which reference may be made, is that of the supply of small typical collections of Canadian minerals and rocks to educational institutions in Canada. This has grown up in consequence of requests received for such illustrative specimens. It was at first possible to make up a few collections from time to time from duplicate material in stock, but of late years it has become necessary to devote a large part of Mr. Willimott's time to the accumulation of suitable material, and the arrangement of such collections. During the year 1895, no less than fifty-nine collections of this kind, embracing 6665 specimens, have been furnished, without any charge beyond that of carriage, to educational institutions in the several provinces, from Nova Scotia to British Columbia. The increasing demand for such collections has rendered it necessary to restrict the supply pretty closely to institutions and schools in which some instruction in natural

science is actually given. In most cases such collections are evidently highly appreciated, as shown by the acknowledgments received, and their value, from an educational point of view is, I believe, very great. It is scarcely possible to overestimate the importance in connection with the development of the resources of the country, of familiarizing the growing generation with even the commoner ores and rocks.

Correspondence.

A large and constantly increasing part of the official correspondence of the Survey, consists of answers to applications for special information on particular mineral products of the Dominion and cognate subjects. Attention is given, in this matter, to placing consumers and producers in connection, in so far as the information at disposal permits. Replies to such inquiries often involve considerable time and trouble, but this their direct importance fully justifies.

Inquiries relating to the geological structure of different parts of the country and the conditions of occurrence of minerals, are also numerous, and during the past year alone, have embraced questions respecting coal, petroleum, gas, salt, water-supply, mineral-waters, stone, clays, lime, cement, peat, fertilizers and many metallic ores. Another large class of applications for information must be made to include the most varied subjects connected with geographical features, heights of summits, or watersheds, elevations of lakes, practicable routes of travel, distribution of forest trees and character of timber, &c., &c. Many of these it is possible to answer to the satisfaction of the inquirers, from the facts included in previous reports, by means of reference to plans or surveys in the office, or from the experience of individual members of the staff.

Examination of specimens.

A very large number of specimens of every kind are also received for identification, determination or description. Many of these are transmitted to the laboratory for examination, and when this appears to be called for, they are there tested, assayed or analysed, the result being communicated to the sender.

It is necessary to mention briefly the work done in the offices under the above heads, as a considerable portion of the time of several members of the staff is thus occupied without any adequate record in the publications of the Survey, although, undoubtedly, to the great advantage of the public at large.

Necessity of a new building.

It is impossible to omit, in this report, a renewed allusion to the entirely insufficient accommodation afforded by the present building for the work of the Geological Survey. Not only are the offices inadequate and inconvenient, but the space available in the museum has become much too restricted, while both offices and museum with all

their valuable accumulations, are subject to danger of loss by fire. The advantage to Canada of having an adequate display of the mineral wealth of the country can scarcely be exaggerated, and that the museum, even in its present state, possesses much interest to the general public, is evidenced by the fact that more than 26,000 visitors have been registered during the year.

Acknowledgments of assistance.

Scarcely a year passes, in which the Geological Survey is not indebted to specialists for important assistance, rendered gratuitously and in the interests of science. At the present time it is appropriate to acknowledge particularly our indebtedness to Professor Charles Lapworth, F.R.S., of Birmingham, who has devoted much time to a study of Canadian graptolites, a work now approaching completion; to Mr. S. H. Scudder of Cambridge, Massachusetts, to whose researches the work on fossil insects already mentioned is due, and to Professor A. Hyatt, of Boston, Massachusetts, for his critical notes on various fossils submitted to him. The acknowledged preëminence of each of these gentlemen in his particular lines of study, is such as to render their contributions of the utmost value.

Work of the Director.

My own time, during the year, has of necessity been employed chiefly in connection with the office and in the rearrangement of some parts of the executive work, as well as in supervising the printing and publication. A few days were, however, spent in the country near the Kingston and Pembroke railway, and about three weeks, in August and September, on a visit of inspection to Athabasca Landing in connection with the boring operations there.

Iron ores in Frontenac, Leeds and Lanark.

Considerable attention has lately been given by the civic authorities and Board of Trade of Kingston, to the possibility of establishing furnaces at that place for the smelting of iron ores found to the northward, chiefly in the counties of Frontenac, Leeds and Lanark. In June last, an influential deputation from Kingston waited upon you, for the purpose of urging that the Geological Survey should undertake at once such an investigation of the quantity and quality of the deposits of ore likely to become tributary to Kingston smelters, as might justify the necessary investment of capital there. It was pointed out, in replying to this request, that a good deal of work had been accomplished by the Geological Survey in the district in question some twenty years ago and at various times since, and I ventured to express the opinion that, taking the iron ore deposits in the aggregate, there could not be any reasonable doubt as to their great available quantity and excellent average quality. Many changes in connection with iron smelting have, however, occurred in late years, and it was

thus considered advisable that such further investigation of the district as might be immediately possible should be undertaken. Mr. E. D. Ingall was consequently entrusted with this work, and with him I visited Kingston early in August, and subsequently looked over a number of the more important iron mines. Mr. Ingall continued and extended the examinations thus begun, with care and in considerable detail. A preliminary report upon his work is given on a later page, and it will be gratifying to those interested, to observe that the favourable conclusions flowing from the results of previous work by the Survey are fully borne out by this report.

Boring at Athabasca Landing.

Experimental boring for petroleum.

At the time of my visit to Athabasca Landing, the boring there had attained a depth of 1500 feet, which has since been increased to 1731 feet. The work of sinking this experimental well has been attended with unlooked-for difficulties and delay, in consequence of the unconsolidated character and the great thickness of Cretaceous shales which has had to be passed through, and the time consumed in communicating with, and meeting the requirements of the work, in a locality situated nearly one hundred miles beyond communication by railway or telegraph. Mr. W. A. Fraser has spared no effort in advancing the progress of the boring, and is entitled to much credit for the manner in which he has been able to overcome the various obstacles met with. A synopsis of his report on the work is given below.

Intention of the work.

It will be remembered, that the object of the experimental boring has been to reach and penetrate the basal sandstone of the Cretaceous formation, which, where it comes to the surface, about 130 miles further north on the Athabasca River, is known as the "tar sands" and is charged with bituminous matter.* In the last Summary, Mr. McConnell's Report on a Portion of the District of Athabasca, is quoted, to the effect that the top of the "tar sands" should be found at Athabasca Landing at a depth of from 1200 to 1500 feet. This statement was based upon the observed dip of the Cretaceous rocks and the relative heights of places along the natural section afforded by the banks of the Athabasca River, and depended upon an estimate, as close as the circumstances admitted, of these factors. It had necessarily to be assumed that the thickness and lithological character of the members of the Cretaceous series remain the same throughout. To a depth of 1090 feet, a continuous mass of shaly beds was penetrated in the

*Annual Report, Geol. Surv. Can., vol. V. (N.S.), Part D.

boring, and it began to appear possible, in consequence, that the Pelican and Grand Rapids sandstones of the observed exposures to the north, had given out where the boring was in progress. When, however, at the above-mentioned depth, a sandstone was encountered, it became probable that this represented one or other of the previously recognised sandstone formations; and before a depth of 1500 feet had been reached, it was clear that this represented the Pelican sandstone, that it was followed beneath by the Pelican shales, and that these in turn were underlain by the Grand Rapids sandstone, the two first-mentioned formations having very nearly the thickness and character presented by them at their natural outcrops.

Information gained as boring progressed.

It became apparent that the La Biche shales had a thickness somewhat exceeding that estimated for them at this place, but that notwithstanding this fact, the Cretaceous series as a whole remained perfectly regular, and that the volume of its underlying members was practically constant. There is thus much reason to believe that the thickness of the Clearwater shales, in which the well is for the present stopped, and that of the underlying "tar sands," will also prove here to vary little from that found at the natural outcrops; in which case the top of the "tar sands" should be reached at about 1800 feet, or less than 100 feet beyond the actual point now attained. Should it prove possible to do so, it is proposed to continue this boring to a depth of 2000 feet, a depth which it is anticipated will pass through the "tar sands" and penetrate, for some distance, the underlying rocks, presumed to be limestones of Devonian age. The bituminous matter with which the "tar sands" are saturated further down the river, has undoubtedly welled into them from the underlying limestones of that vicinity, and it is therefore advisable at this place, to seek for the existence of petroleum in both, if possible.

Regularity of the measures.

Depth to be attained in present boring.

It must be remembered, that the enormous accumulation of bitumen in the sands, where they are seen, has become possible only from the fact that these porous beds lie directly upon the limestones and are themselves covered by impervious shales. It is of course quite possible that impervious shaly layers may occur in the beds representing the "tar sands" beneath Athabasca Landing, and if so, any one of these might prevent the upward flow of petroleum if it exists there. For this reason, the possibly oil-bearing character of the lower beds of the Cretaceous, can not be considered to have been fully tested at the Landing until their whole thickness has been bored through.

It is also necessary to bear in mind that, even in the most productive oil-fields, the occurrence of valuable accumulations of petroleum

A single experiment insufficient.

is confined to certain limited areas or "pools," and that although there can scarcely be any reasonable doubt of the existence of an important oil-field in northern Alberta and Athabasca, the first experimental sinking in an entirely new region, may not prove to be successful as a source of oil. Whatever may be the ultimate result of the first experiment still in progress, it must be admitted that it has already demonstrated a most important fact in respect to the regularity, over a great area, of the members of the Cretaceous formation, and has rendered it possible to estimate within close limits of error, the depth at which the "tar sands" may be looked for along the Athabasca Valley for a distance of about 150 miles.

The great importance of the development of deposits of petroleum in this region, to which allusion is particularly made in my last Summary Report, should, I believe, not only encourage the completion of the present boring, but lead to an even more energetic system of prospecting, under which several experimental wells might be simultaneously progressing, in different parts of the great area which the geological conditions show to be favourable to the occurrence of petroleum in quantities of commercial value.

Plans proposed for further boring.

The depth attained, with the small diameter to which the present boring has now been of necessity reduced, cause its further prosecution to be attended with considerable difficulty, but should no further success be achieved in it, it is proposed in the spring to move the plant down the Athabasca River to the vicinity of the mouth of the Pelican. There, although still more remote from any base of supplies, it should be possible to reach the "tar sands," at the comparatively moderate depth of about 700 feet. If, on the other hand, any petroleum should yet be encountered in the present well, the importance of tracing its existence as far southward as possible, points to the advisability of making a second test somewhere in the North Saskatchewan valley. Should it, however, prove possible to do so, I would strongly advocate the simultaneous sinking of experimental borings at both these places, thereby effecting a saving of a year in the process of testing the great northern field.

Gas and salt water.

The natural gas, met with in quantity and under considerable pressure in the course of the boring at depths less than 1000 feet, and mentioned in the Report for last year, was, at a later stage, almost entirely shut off by the casing. When the Pelican sandstone was penetrated, the hole became filled with salt water, which overflowed at the top, but not in any great volume. When the casing passed this sandstone the flow was reduced, but the water still continued to flow around it into the hole, with, probably, at a later stage,

some additions from the Grand Rapids sandstone. A five-gallon specimen of this water, collected by myself, has been subjected to analysis in the laboratory of the Survey, with results of some interest. They are reported as follows by Dr. Hoffmann :—

Analysis of salt water.

"The water contained a small quantity of suspended matter. This was removed by filtration. The filtered water, which was at first perfectly clear and colourless, became, after standing a short time, turbid, and deposited ferric hydrate, with ultimate complete separation of the iron previously contained in the water.

"Agreeably with the results of an analysis, by Mr. F. G. Wait, an imperial gallon of the water would contain :—

	Grains.
Chloride of potassium	4·32
" sodium	2305·77
" calcium	131·91
" magnesium	79·98
Bicarbonate of lime	1·65
" iron	7·84
Silica	·57
Organic matter	traces
	2532·04
Carbonic acid, free	·65
	2532·69

"The carbonates are calculated as anhydrous bicarbonates and the salts without their water of crystallization.

"The water further contained a very distinct trace of lithium, faint traces of barium and strontium ; also very distinct traces of bromine and a strong trace of iodine."

Geological section developed.

The geological section, as developed in the bore-hole up to the present time, witht he addition of that shown in a natural exposure examined by me last summer, near the site of the bore, may I believe be summarized as follows, the zero datum being the top of the bore-hole, ten feet above low-water level of the Athabasca River, or about 1660 feet above sea-level :—

Height.		Thickness of formation.
	Top of Bank.	
180 feet.	Yellowish sandstones, thin beds, with some ironstone : *Fox Hill* or *Laramie*	15 feet.
165 "	Probably all gray shales, with some thin sandstone layers ; not well exposed.	

Depth.			Thickness of formation.
0 feet.		TOP OF BORE-HOLE.	
1090	"	Gray and blackish shales, often very soft, with occasional thin, hard, layers of sandstone or ironstone. Much gas at different levels between 245 feet and 780 feet: *La Biche shales*.....	1255 feet.
1130	"	Gray sandstone, with a flow of salt water: *Pelican sandstone*.....	40 "
1233	"	Dark shales, often soft; a little sandstone: *Pelican shales*.....	103 "
1461	"	Gray sandstones and gray reddish and blackish shales; the sandstone sometimes very hard and probably nodular, as in outcrop at Grand Rapids: *Grand Rapids sandstones*.	228 "
1731	"	Dark and light-gray shales, generally hard, with some sandstone layers, particularly toward the base: *Clearwater shales*.....	270 " or more.
		Total.....	1911 feet.

Report on boring operations.

As recorded in the last Summary Report, the boring was suspended on the 26th of October, 1894, at a depth of 1011 feet, it being found impossible to go further without more casing. On the work done in 1895, Mr. Fraser has made a detailed report, from which the following account is extracted or summarized:—

I left Toronto for Athabasca Landing on the 10th April and work was resumed on the boring on the 27th of that month. The 300 feet of 5§-inch casing which had been sent up the previous fall, had not arrived in time to be driven however, so, as the first part of the work, we proceeded to try driving it. It was found that the 5§-inch casing had parted about 200 feet from the surface, so I deemed it unadvisable to try driving it—in fact it would have led only to disaster. It could not be determined at what exact depth it had parted, for it would not have been safe to attempt to draw it; the walls would have caved in and perhaps covered up the bottom lengths, so that the top lengths could not have been got into them again.

I then had the 4§-inch casing put down. We used the under-reamer from the former depth, 825 feet, to the full depth of the bore, 1011 feet.

At the depth of about 1000 feet, the 4§-inch casing would go no further, the bottom length became bent, and we could not work through it with safety. I did not consider it advisable to try to straighten it out, for fear it might become so badly damaged that no other smaller casing could be put through it.

Under the circumstances I proceeded to Ottawa for consultation on the 17th May. My suggestion that an additional string of 3§-inch casing be procured, and the boring proceeded with, was approved of, and 1500 feet of this sized casing was ordered. A full set of new tools of smaller size had also to be provided and the making of these caused considerable delay. Both casing and tools were,

however, shipped on the 11th June from Petrolia, and arrived in Edmonton on the 24th of the same month. I got back to Edmonton by the same train, and immediately procured teams and had the casing and tools sent to the Landing, where I arrived on the 29th. Report on boring operations—*Cont.*

One of the skilled men I had taken up from Petrolia, refused to work any longer, owing to a disagreement with the driller while I was away. This occasioned me some inconvenience, but I turned in myself and took his place, and the work proceeded from this time on very rapidly.

The first work was to put in the small casing (always spoken of as four inch) down through the 4½-inch. At 985 feet it struck hard cavings which had been driven up in the 4½-inch by the gas, and would not go any further. We drilled this out, and put it down to the bottom of the bore, 1012 feet.

Drilling was then recommenced, the shale being so soft that the casing followed the bit without any reaming for the next three or four feet. The materials passed through, with notes upon the work, are as follows, in descending order :—

1012–1015 feet, dark soft shale.

At 1015 feet this changed to a hard light-coloured shale.

At 1017 we struck a mud-vein which ran in as fast as we could take it out with the sand pump. The shale, though hard, still caved badly.

1017–37, still caving. In reaming found it quite hard at 1020 feet.

1037–69, formation dark shale and caving badly. Struck gas at 1055 feet.

1069–84, formation dark shale, caving badly.

1084–90, formation dark shale.

1090, struck sandstone (afterwards proved to be Pelican sandstone) which carried water that flowed over the top of the casing and was strongly saline.

1090–94, sandstone. Put down the casing, but it did not shut off the water, which continued to flow over the top.

1094–1130, still sandstone, water present but in less volume. When the tools were left out of the hole at night, and the water was allowed to find its own hydrostatic level, it stood at about 60 feet below the surface.

1130, reached shale, pretty clearly the Pelican shale of Mr. McConnell.

1130–60, shale, dark in colour and caving badly. The sandstone and shale here mixed in the hole to the consistency of cement, which made the drilling difficult.

1160–70, dark shale—soft.

1170–1207, dark shale with layers of sandstone.

1217–33, dull reddish shale and sandstone.

1233–37, dark gray shale—soft.

1237–42, light gray shale—very hard.

1242–47, light gray shale—soft.

1247–55, dark shale—soft.

1255–60, sandstone—very hard.

1260–67, dark shale—soft.

Up to this time we had been able to pull the casing up and down in the hole, and it worked rather freely. We had moved it up and down almost every day to prevent it becoming fast. At 1267 feet, the bore was caving very badly and the casting became fast. In trying to move it we pulled the derrick down and narrowly escaped a serious accident, particularly to the driller, who was buried underneath the ruins, but unhurt.

Report on boring operations—*Cont.*

Lumber had to be sawn out by hand to rebuild the derrick, and about a week was lost by this mishap. When the repairs had been completed, we were obliged to have recourse to driving. We screwed an iron cap, which had been provided for such a contingency, into the top length and drove on it. From this depth to the bottom the casing required more or less driving.

1267-85, dark shale—soft.
1285-95, sandstone—very hard.
1295-1300, sandstone—hard.
1300-10, sandstone—very hard.
1210-1323, dull reddish shale and sandstone—soft.
1323-38, reddish shale.
1338-50, sandstone and dark shale.
1350-63, dull reddish shale with a little sandstone.
1363-79, dull reddish shale and sandstone.
1379-91, dull reddish shale and a little sandstone.
1391-1425, sandstone, with some layers of dark gray shale.
1425-35, sandstone, medium hardness, shale dark.
1435-48, sandstone, hard with soft streaks.
1448-61, sandstone and dark shale interstratified.
1461-73, dark shale. (Thin streaks of lignite about here.
1473-91, dark shale.
1491-1531, hard shale, light gray colour.
1531-40, shale; not quite so hard.
1540-66.
1566-70, hard sandstone.
1570-76, very hard sandstone.
1576-89, hard shale, drilling very like limestone.
1589-1601, hard shale, light gray in colour.
1601-13, similar, with streaks of soft shale.
1613-26, hard shale.
1626-33, very hard. Iron-stone boulder.
1633-43, hard shale.
1643-55, hard shale, a little gas.
1655-82, hard shale.
1682-89, hard and soft shale alternating.
1689-95, shale and sandstone alternating.
1695-1722, shale and sandstone alternating. Shale very soft and caving in badly.
1722-31, shale with a little sandstone.

At this depth (on October 10th) further drilling became impossible, because of caving-in of the sides of the hole, until the casing should be put down to the full depth. The casing stood at the time at 1473 feet. The under-reamer, which had been gotten new in June, was completely worn out; so I proceeded to Calgary and had a new one made there. I returned on the 25th October, when work was resumed again, and the hole was subsequently enlarged and the casing carried down to a depth of 1668 feet. When this had been accomplished, it became necessary to close operations for the season, owing to the onset of very cold weather.

When it became fully established that the formations were in regular order, as observed by Mr. McConnell on the lower reaches of the Athabasca, it was evident

hat the "tar sands" would be encountered at a greater depth than anticipated, consequently the 1500 feet of 4-inch casing would be insufficient. An additional 300 feet was ordered, and forwarded by the department. No delay was met with, for this casing arrived before it was actually needed, thanks to the prompt manner in which it was forwarded. The quantity of casing on the ground should be sufficient to carry the bore down to 2000 feet. Report on boring operations—*Cont.*

The sinking of the bore during the season of 1895, has been a difficult undertaking. The formation is the very worst that can be encountered, on account of the constant caving, requiring to be cased all the way, and to this the sandstone strata proved a serious obstacle, as they required to be reamed off before the casing could be put down. The under-reamer got for this purpose was quite inadequate to the work, as made in the shops; but, as the result of much experience on this bore, it is now a first-class tool and does its work very satisfactorily.

The price of success has been eternal vigilance. An instance of this may be given which occurred during the reaming, at 1285 feet. We were six days reaming three feet, and when the casing was put down it had only *one-quarter inch clearance*. This was through a very hard sandstone, which wore off the steel as though it were being held on a grindstone driven by steam power. We could not pull up the casing had we let it down, and if it did not go through all work on the bore would have ended there. We made sure of our measurements, and then put the casing down successfully.

Although operations were commenced over a year and a half ago, the drill being first started on August 15th, 1894, only eight months of actual work has been done on the bore, divided as follows:—1894, two months; 1895, six months. The balance of the time had been lost for actual work, owing to the great distance by which the locality is removed from the base of supplies.

The work is of such a nature that machinery and tools cannot be made so that breaks will not occur. Neither would the duplicating of parts overcome this evil, for one particular part may break two, three, or five times, whilst the parts are so numerous, bulky and expensive that one would be forced to spend a small fortune on freight in moving the plant about in such an out-of-the-way place, to say nothing of the first expense of purchase. All that can be done has been done in the past to provide against such delays, having a due consideration for the fact that economy has been carefully and at all times impressed upon me by the department.

The boring at the Landing has been put down as cheaply as possible, and if it had been done by day labour, it is safe to say that it would have cost double the sum it has.

At present the amount of casing in the bore-hole is as follows:—

37 feet of 6§-inch diameter; 625 feet of 5§-inch diameter; 1000 feet of 4§-inch diameter; 1070 feet of 3§-inch diameter (probable estimate). Much of this can be recovered for use next year in another bore.

There is above ground:—30 feet of 6§-inch diameter; 400 feet of 5§-inch diameter; 500 feet of 4§-inch diameter.

During the summer, two large boats capable of carrying ten or twelve tons of plant, have been constructed to take the boring outfit down to the Pelican River,

Report on boring operations—*Cont.*

if this should be decided upon. These boats were built by the men while work was interrupted on the boring, as above described.

In conclusion, I beg to call your attention strongly to the value of the information obtained, with regard to the continuance of the rock-formations observed near the outcrop of the "tar sands," at this great distance from the said outcrop. It means that the forecast that they did so extend is now an absolute certainty, and is one of the strongest arguments against the popular fallacy that geological knowledge is of no practical value in determining the extent of a petroleum deposit. We now know that the formations overlying the petroleum-saturated sandstone, extend with almost unvarying regularity at least one hundred and fifty miles to the south and west. That they have been found at a greater depth than anticipated matters very little—in fact, in my opinion, this is rather favourable to the existence of a greater natural reservoir for oil, should it still be there.

The total expenditure in connection with the above operations, during the calendar year 1895, has been $7838.66, of which $6125.50 was paid to the contractor as the work progressed, $1504.31 was paid for casing and transporting the same, and $208.85 represents travelling and minor expenses.

Gold-washing on the Saskatchewan.

While at Edmonton, in connection with my visit to Athabasca Landing, some facts of interest in connection with gold-washing on the North Saskatchewan were learned. This industry has been prosecuted in an irregular manner, at low-water stages of the river, for many years. The principal paying bars are found along the river within a distance of about sixty miles above and a similar distance below Edmonton, but of late, ground has been worked even as far down as Battleford, some 250 miles below Edmonton. A larger number of men than usual were in 1895 engaged in this work on the Saskatchewan, probably about 300 in all, while it was estimated that gold to the value of $30,000 had already been purchased at Edmonton, before the end of August. Simple mechanical appliances of various kinds, worked by hand, are now employed successfully in raising gravel from the submerged bars, a sand-pump has been tried without much success, but this year a large dredge has been constructed for the work. This was about ready for operation at the time of my visit, but no particulars are available respecting its work since.

Distribution of gold.

The occurrence of gold is not, however, limited to the North Saskatchewan. As may be gathered from previous Reports of the Survey, it is found in greater or less abundance, in a similar manner, on portions of the courses of all the rivers east of the Rocky Mountains from the 49th parallel northward. Good returns obtained by individual miners on the corresponding part of the Athabasca River, led last summer to the outfitting of many parties for that river. The results were on the whole disappointing, but it must be added that most of the advent-

urers were not even skilled in the work, or likely to be able to save the gold, which is always very fine.

To the south of the Peace River, at least, the gold thus found in the beds of the rivers of the Great Plains, does not appear to be derived directly from the Rocky Mountain region. The question of its origin has been discussed in several previous Reports, but further investigations appear to be required to settle this definitely.

Gold mines on Lake of the Woods.

On my return journey, a couple of days were spent on the Lake of the Woods, with the purpose of seeing something of the progress of the gold mines there in course of development. Acknowledgments are due to Mr. R. H. Ahn, for his kindness in assisting me in this endeavour; and I had also the pleasure of meeting, at Rat Portage, Mr. A. Blue, Director of the Ontario Bureau of Mines. In company with Mr. Blue, visits were made to several of the locations. The *Sultana* is the only one of these which can be said to have, at the time, passed the experimental stage. The shaft is there down about 200 feet, with levels run out on the vein to the north and south, while a considerable amount of ore has also been taken taken out from the outcrops of the veins. A ten-stamp mill with Frue vanners is in constant operation, the free gold only being obtained at present. Pyritous "concentrates" which amount to about one-hundredth of the whole weight of quartz, and are said to carry $50 to $60 worth of gold to the ton, are put aside for future treatment. Through the kindness of Mr. J. F. Caldwell, the owner of the Sultana, I am able to state that the total yield of gold from this mine to date, has been of the value of about $90,000.

At the *Gold Hill* mine, a ten-stamp mill had been put in place and was nearly ready for operation at the time of my visit, while work was actively in progress on the lodes. The *Regina* mine was not visited, but another ten-stamp mill is now at work there, and very excellent specimens of auriferous quartz from the mine were shown to me by General Wilkinson. Projects are on foot for the installation of milling machinery on other properties around the lake, and, generally speaking, an encouraging amount of well-directed activity is being shown, such as to lead to the belief that the gold mining industry is likely to be pursued in future in a business-like manner and with good results.

Auriferous belts.

Taken in connection with the later developments about Rainy Lake, the Seine River and in the Manitou district, of which some particulars will be found in Mr. McInnes's report on a later page, the circumstances are such as to show, more clearly than ever, the auriferous character of the Huronian rocks. Already the prospectors and miners have become

accustomed to recognize this fact, over the whole region, and the geological maps prepared by this department are valued by them as most important guides, while urgent demands are made for the further extension of the work of the Survey.

Metalliferous character of Huronian rocks generally.

From a still wider point of view, embracing the nickel, copper and gold deposits of the vicinity of Sudbury and Sault Ste. Marie, as well as those above particularly referred to, the economic importance and metalliferous character of the rocks of the Huronian system become even more apparent. This fact was recognized and the importance of the geological conditions insisted upon by Sir William Logan, in reports of the Survey made nearly forty years ago, and it is gratifying to observe that the practical miner is now beginning to appreciate the value of a large amount of geological work carried out in the country to the north of the Great Lakes, which, a few years ago, it might have appeared difficult to justify in the light of any economic results up to that time achieved. There can now be very little doubt, that every square mile of the Huronian formation of Canada will sooner or later become an object of interest to the prospector, and that industries of considerable importance may yet be planted upon this formation in districts far to the north, or for other reasons at present regarded as barren and useless.

Distribution of field-parties.

Turning to the operations of the regular field parties of the Geological Survey, the following synopsis of their distribution, by provinces, may in the first place be given :—

British Columbia	2
North-west Territories (boring operations)	1
Manitoba and Keewatin	1
Ontario	4
Quebec	4
Nova Scotia	2
Total	14

Special examinations in the field.

In addition to the above parties, which were engaged in continuous field-work during a great part of the season, several members of the staff were occupied for shorter periods with special investigations in the field. Mr. J. F. Whiteaves, spent a few days in palæontological researches on the Island of Montreal and in its vicinity, and Dr. H. M. Ami was occupied for nearly a month in similar work in Nova Scotia; both in connection with the definition for mapping of the geological formations. Mr. W. F. Ferrier was authorized to visit and examine several localities where ores and minerals of interest had been reported. Mr. J. White spent two weeks in running a line of survey, found to be

necessary for the laying out of one of the Ontario map-sheets. Mr. Willimott also, as noted in the sequel, made a number of short journeys for the purpose of collecting duplicate material to be employed in making up collections for educational institutions. Of the gentlemen not regularly attached to the staff of the Survey, who have in former years carried out geological work, Professor L. W. Bailey of Fredericton, alone was entrusted with any such work during the year, and the funds available restricted his operations to a short period.

Synopsis of field-work.

Before entering with such details as are appropriate repeating the field-work of the season, the following additional general observations may be given, which, in conjunction with the foregoing notes, will serve as a brief outline of the scope and results of the explorations and surveys of the year: —

The work done in British Columbia has been confined to two districts in that extentive province. Its results, given at greater length below, are therefore insufficient to indicate the great general development of mining there is in progress. The facts detailed by Mr. McConnell, however, show the wonderful expansion of mining enterprises taking place in the West Kootanie district and the extent and richness of the deposits carrying silver and gold there. One of the most notable points brought out, is the occurrence, lately ascertained, of ores of exceptional value in parts of the granitic area, which has heretofore been almost disregarded by the miners.

Most of the facts relating to the structural geology and actual survey of the district, are reserved for a detailed report and map, for which much further work is still needed. Ten years ago this district was almost an untrodden wilderness, but it is difficult now, with the means at the disposal of the Geological Survey, to keep pace with the march of discovery. Mr. McEvoy's work in the Shuswap region, has been given principally to obtaining additional data for the map, now approaching completion. The recent discovery of a large deposit of gypsum in this region is noteworthy, as being the first of the kind found in British Columbia.

Mr. Tyrrell's exploration of the country to the east of Lake Winnipeg, has afforded the means of representing that region correctly upon the maps. Although found to be underlain almost exclusively by Archæan gneisses and granites, an unexpected development of superficial silty deposits was met with, such as to afford a large tract of probable agricultural value.

In the Rainy Lake and Thunder Bay districts of Western Ontario, the surveys carried out by Mr. McInnes, of which an interesting

Synopsis of field-work.—*Cont.*

summary is given, have been in close connection with the development and definition of the auriferous quartz-veins and the iron ores. The rocks characterizing this country are divisible, in a general way, into Laurentian and Huronian, the former term being applied to the granitoid gneisses and granites of similar composition inclusively, in the absence of criteria such as to enable any distinct line to be drawn between these two classes of rocks, and without necessarily implying the existence of any rocks preserving their originally bedded character, like those of the Grenville series. The Huronian rocks include the Keewatin and Coutchiching of Dr. Lawson, and of these the relations will be more fully explained in Mr. McInnes's forthcoming report. It is in this series that minerals of value are found to occur, and it may be added, that some assays lately made in the laboratory, of quartz from the Manitou and Seine River regions, prove the existence of quartz-veins exceptionally rich in gold, of which it only remains to prove the extent and continuance in depth.

Rocks very similar in character to those above referred to, but even more closely akin lithologically to those of the Sudbury region, of which they are in fact the continuation, characterize the area covered by the Nipissing and Temiscaming sheets. These two maps, with a report relating to their united area, are in process of compilation by Mr. Barlow. Frequent inquiries are already being made for maps of this region, by prospectors anxious to pursue their explorations in it, and it will be endeavoured to publish the sheets referred to as soon as possible. Upon Lake Temiscaming is one of the typical Huronian areas first discovered and named by Sir William Logan, and its close examination has produced results of considerable value from a geological standpoint.

The country in the vicinity of the Ottawa River, from the vicinity of Ste. Scholastique to that of Pembroke, now being laid down in detail for the first time by Dr. Ells, comprises extensive areas of the Grenville series of the Laurentian, with its great crystalline limestones and other characteristic rocks. These, it is hoped, it may be possible to trace into some clear connection with the representatives of the Hastings series of Vennor, of which the relations have remained more or less in doubt. The economic minerals of the region covered by this work comprise iron-ores, mica, graphite, apatite, asbestus, as well as marble and other structural materials.

The map-sheet extending to the south-east of Ottawa and including Cornwall, upon which Mr. Giroux has been engaged, is underlain by little-disturbed Cambro-Silurian rocks. The areas occupied by the various formations comprised within this period are being carefully defined.

Synopsis of field-work.—*Cont.*

No metalliferous deposits are known to occur, but questions relating to building-stones, brick-clays, peat, marl and the existence or otherwise of porous beds capable of yielding potable water, are involved.

The survey of the Noddaway River in Northern Quebec, by Dr. Bell, and the establishment of the fact that the stream previously known to exist to the north of Grand Lake, on the Ottawa, is one of its principal sources, makes a substantial contribution to the geography of the province. The most important geological discovery made, and one which promises to have results of economic value, appears to be the existence of a great area of the Huronian system to the north of the main watershed. The occurrence of a wide expanse of country characterized by good soil and bearing a considerable growth of forest, is also notable.

Mr. Low's expedition up the Manicuagan River and in the country about the height-of-land between this river and those draining to the northward, had also in part a geographical object. Its geological results are, however, not without importance in connection with the accumulation of material for a more complete map of the rocks of the Dominion. The supposition that the region traversed is in general one of Laurentian rocks has been confirmed, but it has been proved that the Upper Laurentian, or Granville series, is present there, as well as important masses of anorthosite rocks. A remarkable bed of magnetic iron-ore was also discovered, although this is too far from means of transportation to be of any immediate utility.

In the 'Eastern Townships' of Quebec, Mr. Chalmers has begun a critical reëxamination of the auriferous gravels, bringing to bear upon this problem his long experience of the superficial deposits of the neighbouring parts of New Brunswick, and of the events of the glacial period generally. The wide spread of the auriferous drifts beneath the boulder-clay has been demonstrated, while various facts of scientific value have also been noted; such as the probable twofold division of the boulder-clay, the height and continuity of old sea-beaches and the various directions in which the ice flowed over the district during different stages of the glacial period. The discovery of an auriferous conglomerate among the ancient metamorphic rocks of the region, at Dudswell, is also a matter of interest and possibly of importance.

Mr. Fletcher's work, in Cape Breton, has been directed to a reinvestigation of the Sydney coal-field, preparatory to a new issue of the geological map-sheets, of which the previous edition has become exhausted. Since the surveys of Mr. Robb, many years ago, great progress has been made in the working of these coal-fields, rendering

Synopsis of field-work.—*Cont.*

necessary such a reconsideration of structural facts as that now in progress. In the counties of Halifax and Hants, Nova Scotia, Mr. Faribault has continued his careful survey of the Cambrian gold-bearing rocks. The facts discovered in regard to the relation of the auriferous veins to the various well-marked anticlines, have rendered necessary a close study of these folded strata, together with their associated granitic masses and the various faults and fractures affecting them. All these features are being laid down with accuracy upon maps on the scale of a mile to the inch, and the interest of the mining population in the work is freely expressed.

The work done by Professor Bailey, of Fredericton, during a few weeks, in the south-west part of Nova Scotia, had reference to a revision of the general geology of that portion of the province, which has not yet been mapped in detail.

Arrangement of following summaries.

In presenting the subjoined preliminary reports on work done in the field, they are arranged, in conformity with previous practice, in order by provinces and districts from west to east. In respect to detail, greater prominence is, as a rule, given to the results of explorations and surveys which are as yet incomplete, and of which it will not be possible to present final reports and maps for some time to come, and greater space is given to those aspects of the work of the year which appear to have immediate importance from an economic point of view.

BRITISH COLUMBIA.

British Columbia.

During the early part of the year, much of Mr. R. G. McConnell's time was occupied in completing for publication a report and map of his exploration on the Finlay River, made in 1893. Work was also in progress on the surveys made in West Kootanie during 1894, and on the rocks and minerals obtained from this district and from the Finlay.

West Kootanie. Work by Mr. McConnell.

On the 11th of June, Mr. McConnell resumed field-work in West Kootanie, assisted, as before, by Mr. H. Y. Russel. The work was brought to a close on October 5th.

The season available for effective geological work on the high mountain ranges of the Kootanie district, judging from the experience of the last two seasons, is practically limited to the two months of July and August, with the first two weeks of September, and even during this short period, operations are often seriously hindered by forest fires and the dense smoke arising from them. The snow seldom

disappears from the high summits before the end of June, and usually re-appears on the mountain tops before the middle of September. The shortness of the season, taken in conjunction with the rough, wooded, pathless character of most of the region, necessarily cause its geological examination to be a lengthy undertaking. British Columbia—*Cont*

Mr. McConnell reports as follows on the progress made in his work, and the condition of mining in the district*:

"Field-work was commenced with an examination of Slocan Lake and the surrounding country, which occupied about a month. After completing this, work was continued eastward to Kootanie Lake, and southward to Balfour, along the zone of shales and schists bordering the great granite area of the district. A trip from Kootanie Arm to Slocan Lake and back by the Slocan River was contemplated, but had to be abandoned owing to the early appearance of the snow. The work included a rough topographical survey as well as geological survey of the district, the former being conducted by Mr. H. Y. Russel, the latter by myself. Operations of the season.

"Slocan Lake is one of those long, narrow bodies of water which occur so frequently throughout the mountainous districts of British Columbia. It occupies part of a great valley, hewn out of the mountains long before the present drainage-system was inaugurated, extending from Nakusp on the Upper Arrow Lake, to Kootanie River. locan Lake.

"The lake has a length of twenty-three miles, and an average width of about a mile. Its depth increases, going southward, from 750 feet near the mouth of Wilson Creek, to 930 feet off Cape Horn. Marginal flats are absent, except at the mouths of the principal feeders; and the high mountains which surround it on all sides, rise either gradually, or in precipitous cliffs, from the water's edge. The slopes of the mountains are covered with a dense coniferous forest, except where forest fires have passed, up to a height of 3000 feet above the lake, and with a scattered growth of pine, spruce and fir, up to a further height, dependant on local conditions, of from 1000 to 2000 feet.

"The region between Slocan Lake and River and Kootanie Lake, partially examined during the season, is covered mainly by granite, fringed on the north and east by a border of slates and schists, and is everywhere of a mountainous character. The granite-mass, originally dome-shaped, has been carved by the drainage-system of the region into bold craggy mountains and mountain ranges, which culminate in a rugged mass of snow-clad peaks, situated between the south-end of Region between Slocan and Kootanie Lakes.

* NOTE.—The bearings given throughout this and the succeeding reports are referred to the true meridian unless otherwise specially stated.

British Columbia—*Cont.*

Slocan Lake and Ainsworth, the highest summits of which approach 9000 feet in height above the sea. The principal streams of the district, including Lemon Creek, Ten-mile Creek (Slocan Lake), the south fork of Kaslo Creek, Woodberry Creek and Coffee Creek, radiate from this group and descend rapidly through deep, steep-sided valleys to the main waterways. A second range of prominent peaks, scarcely inferior in height to the central group, occurs north of the Kaslo-Slocan wagon-road. The Whitewater, Lyell Creek, and other tributaries of Kaslo Creek, head in glaciers which descend from this range.

Boundaries of the granite.

"The principal geological boundary in the district between Slocan Lake and River and Kootanie Lake, is the sinuous line separating the granite area from the bordering slates. Starting from Four-mile Creek on Slocan Lake, this line follows that stream in an easterly direction for ten miles, then bends to the north across the range separating Four-mile Creek from Cody Creek and following the latter stream in a northerly direction for a couple of miles. From Cody Creek, the granite border runs almost directly east to Twelve-mile Creek. After crossing this creek the line becomes more irregular, as several spurs leave the granite area and penetrate for varying distances the group of mountains lying between Ten-mile Creek and the South Fork of Kaslo Creek. At the latter stream, the granite recedes a couple of miles, then bends around a deep embayment of slates, and continues on in an easterly direction towards Kootanie Lake. Four miles from the lake, the line of junction turns abruptly southward, and continues in this direction until near Balfour, where it bends more to the west and crosses the outlet of Kootanie Lake about four miles below its head. Inliers of slate in the granite, occur at the head of Eight-mile Creek (Slocan Lake), on Four-mile Creek and at other places, while bosses of granite, separated from the main area, break through the slates at Paddy's Peak, Reco Mountain, and north-east of New Denver.

Rock-series developed.

"The stratified rocks bordering the granite area are everywhere tilted at high angles, broken by numerous faults, and frequently overturned. They may be divided into four main groups, as follows, in descending order:—A series of dark shales and slates associated with limestones and calcareous quartzites, which may be provisionally named the Slocan slates; a series of greenish, probably mostly diabase-schists, interbedded with some slates (Kaslo schists); a series of dark calc-schists holding occasional bands of limestone and green schists (Nisconlith series); and a basement series of mica-schists, calc-schists, crystalline limestones and gneisses (Shuswap series).*

*Compare Annual Report, Geological Survey of Canada, vol. IV. (N.S.), part B. The Slocan slates are probably the equivalents of the Adams Lake series, but it may be an advantage for the present, at least, to refer to them by a local name.

British Columbia—*Cont.*

Distribution of rocks.

"The Slocan slates occur all around the northern end of Slocan Lake, and extend eastward, striking in a north-westerly and south-easterly direction, along the Kaslo-Slocan wagon-road to the Forks of Kaslo Creek. The slates of this group strike into the granite area, and with the exception of a narrow strip which skirts the eastern edge of the granites south to near Balfour, are cut off by it. The Kaslo schists were traced from Balfour north to Kaslo Creek, and then in a north-westerly direction to the edge of the map. These schists are altered in places into serpentine. The Shuswap series occurs in a band of varying width along the shores of Kootanie Lake, and was also found on the western side of Slocan Lake near Saw-mill Creek, where it is inclosed in granite.

"The classification of the rocks of the district as given above, is based entirely on differences in lithological character, as no fossils were found, nor were any unconformities worked out. The three systems appear in places to graduate into each other, and the lines separating them must be drawn, so far as present evidence goes, in a more or less arbitrary manner. The stratified rocks are traversed by two systems of dykes, one apparently contemporaneous with the granites and the other much younger. The former is cut by the fissures holding the mineral lodes of the district, while the latter, in some cases at least, cuts these fissures.

Metalliferous veins.

"Mineral veins occur to some extent in all the formations represented in the district, irrespective of age or origin, but are more numerous and better defined in the Slocan slates than in the older stratified rocks or in the granites. The famous Slocan Star occurs in this formation, and also the Alamo, Idaho, Mountain Chief, Noble Five, Reco, Alpha, Wellington, Payne, Washington, No. 1, Skyline, and dozens of other promising leads. The Eureka and the great Silver King vein, occur in the Kaslo schists, and the Bluebell and Highland in the Shuswap series. As examples of those occurring in the granite, may be mentioned the Fisher-maiden, Enterprise and Arlington.

Rich veins in granite.

"A number of mines and prospects in the district were visited during the progress of the work and brief notes were taken, some of which may be of interest here. The granite area south of the main Slocan mining camp, hitherto somewhat neglected, was prospected pretty thoroughly during the past season, and a large number of claims—some of considerable promise—were staked out. Among those visited in this section were the Arlington, celebrated for the richness of its ore, the Nancy Hanks, Tamarac, Dayton and Enterprise.

"The Arlington, on Springer Creek, located in 1894 by C. E. Fielding, follows a zone of shattered rock, which as shown in the single

British Columbia—*Cont.*

opening so far made, has a width of from six to eight feet. The ore occurs mostly in siliceous stringers, ranging in width up to four or eight inches, which run in an irregular manner through the fissured and altered granite, but is also found disseminated through, or in small bunches, in the granite itself. It consists principally of native silver, galena, gray copper and argentite. The lead strikes in a north-easterly direction and is reported to be traceable all the way to Ten-mile Creek, a distance of over ten miles. Claims have been staked on it for this distance.

"A large boulder of altered granite, holding stringers of ore resembling that of the Arlington, occurs on the Speculator, the third claim north of the Arlington. The Tamarac is situated on Whittaker Creek, a branch of Springer Creek The workings here have exposed a quartz-seam, from twelve to eighteen inches in width, holding grains and bunches of galena, argentite, and ores of copper. The seam is very regular and has been uncovered for a distance of 250 feet. The Dayton and Nancy Hanks are somewhat similar in character.

"The Enterprise, situated on the northern slope of the ridge separating Springer from Ten-mile Creek, was located in 1894 by R. Kirkwood. This claim is crossed by a well-defined fault-fissure, running in a north-easterly direction and dipping to the south-east at an angle of 80°. The fissure has a width of twelve to eighteen inches and is filled partly with ore and partly with a quartz gangue. The ore consists mostly of galena with some gray copper, and in common with other ores in the granite belt is high grade in silver. A large number of claims have been staked out in the vicinity of the Enterprise, but little development work has so far been done on them.

Claims on Eight-mile Creek.

"The claims on Eight-mile Creek, north of Ten-mile Creek, occur mostly in an inlier of hard, rusty slate or schist, several square miles in extent, inclosed in the granite. The L. H., Baby Ruth, Los Vegas, Mountain View, Granite Mountain, Daisy, and a number of others are situated on this strip. The L. H., is a gold claim of a somewhat peculiar character. The slates are fissured along an east-and-west line, and the schistose country-rock adjoining the line of fracture on the south has been altered, silicified, and impregnated in places with ore, along a zone varying in width from 20 to 40 feet. The alteration varies greatly in intensity, in some places being scarcely noticeable, while in others the rock has lost all traces of its original character. The ore appears to consist mostly of native arsenic, mispickel, pyrite, and pyrrhotite, distributed through the vein in an irregular manner. Assays from samples taken at intervals across the whole width of the lead (40 feet) are stated to have averaged $23 in gold to the ton, and others taken

across a selected band seven feet in width, to have averaged $125 to the ton. British Columbia—*Cont.*

"The Baby Ruth, situated on a branch of Eight-mile Creek, about half a mile below the L. H., shows a well defined fault-fissure a couple of feet in width, filled with a quartzose gangue and bands of residual clay. The Granite Mountain and Mountain View leads, appear to consist of narrow tongues of slate penetrating the granite. The slate is partly altered, and mineralized to some extent with pyrite, blende, and galena. The Los Vegas and Daisy, both reported to be valuable claims, were not examined.

"Small inliers of slate occur in the granite in what is known as the Galena Farm, a plateau south-east of Silverton, so called on account of the numerous galena boulders scattered over it. The principal claims examined here were the Noonday and Currie. The workings on the Currie consist of a small shaft and a short tunnel, both inaccessible at the time of my visit, on account of water. The lead where uncovered, has a width at the surface of ten to fifteen feet, and consists of a brecciated mass of quartz and angular fragments of slate, mingled with galena, blende, and pyrite. It appears capable of yielding a large quantity of concentrating ore. The Noonday, situated near the junction of the slate inlier with the granite, is somewhat similar in character. Galena Farm

"The known area of the mineralized granite belt, was greatly enlarged during the latter part of the season, and now includes all the country drained by the various branches of Lemon and Cedar creeks, and probably extends even farther to the south and east. The rough character of the country, and the almost total absence of trails, has prevented much development work being done on the various lodes, beyond that required for assessment work, and it is highly desirable that readier means of access to this promising region should be opened up.

"A short account of some of the principal mines in the main Slocan mining camp, was given in my summary of last year's work. A number of others were visited during the past season, but it will be impossible here to make more than the briefest mention of these. Slocan mining camp.

"This camp has passed the doubtful stage, and is now in a thoroughly prosperous condition. The workings on the older mines have proved the continuity in depth of the lodes in most cases, and new ore-bodies are constantly being opened up. Several tramways and concentrators are in course of construction, and two lines of railway will this winter compete for the rapidly increasing output of ore.

British Columbia—*Cont.*

"The principal mines in the Slocan district, are situated on the slopes of the long irregular ridge separating Four-mile Creek from the South Fork of Carpenter Creek, and on the ridge separating the South Fork of Carpenter Creek from Seaton Creek, or the Middle Fork of Carpenter Creek. The former ridge is known as Silver Mountain, and around it are grouped the Alpha, the Reed and Robertson groups, the Canadian group, the Mountain Chief, the Alamo, Idaho, Cumberland, Yakima, Wonderful, Ruth, Slocan Star, Ivanhoe and many others.

The Alpha.

"The Alpha is situated on the Four-mile slope of the mountain, about two miles east, and 2500 feet above Slocan Lake. The steep slope near the mine, is overcome by a gravity tramway 1600 feet in length, from the foot of which a good wagon-road leads to the lake. The Alpha lead has the character of a crushed zone, 20 to 40 feet in width, running through shales and limestones. The strike is N. 24° E., and the dip is south-easterly at an angle, near the surface, of 35°. The ore occurs mostly in large pockets, one of which yielded 800 tons, and two others about 200 tons each. It consists principally of rich galena, with some blende, and gray copper. Considerable tunnelling has been done at this mine, and at the time of my visit an incline, following the dip of the lead, was being sunk. Farther to the south-east on the same slope, are the Reed and Robertson claims, situated on a strong lead 20 to 30 feet in width, which is stated to be traceable from Four-mile Creek to the summit of the ridge, a distance of over two miles. Still farther east, on the crest of the ridge, are the Chamblet and Britomarte claims.

"Among the more important mines on the northern slope of Silver Mountain, are the Mountain Chief, from which 1000 tons of ore has already been shipped, and the Alamo, Idaho, and Cumberland, on the head of Hauser Creek. The Idaho was idle at the time of my visit, but good forces of men were engaged on both the Alamo and the Cumberland.

The Alamo

"The Alamo affords a good type of the leads in this vicinity. It shows a well-defined fissured zone from five to ten feet in width, traversing the slates in an easterly direction and filled with crushed and brecciated slate, calc-spar, spathic iron, quartz, and ore. The dip is southerly, at an angle of 75° in the upper levels, but lower down it becomes nearly vertical. The lead is situated on a steep slope, and, like most of the mines in the Slocan district, offers especial facilities for being mined by tunnels, four of which have been driven into it at levels about 100 feet apart, in all of which important bodies of pure and concentrating ore have been exposed. The ore consists principally of galena, with some blende, gray copper, pyrargyrite and pyrite.

British Columbia—*Cont.*

"A concentrator of 100 tons capacity, was erected by the Slocan Mining Company at the mouth of Hauser Creek during the past summer, to treat the concentrating ores from the Alamo and other mines in the vicinity. A tramway a mile and a quarter in length, has also been built up Hauser Creek, from the end of which wagon-roads lead to the different mines.

Mines on north slope of Silver Mtn.

"On the north slope of Silver Mountain ridge, are the Slocan Star, Ruth, Ivanhoe, Wonderful, and other claims. A description of the Slocan Star was given in last year's summary. The fourth tunnel, which was incomplete at the time of my former visit, reached the ledge at a distance of 500 feet. Drifts—mostly in ore—are now being driven along the lead, and an upraise to connect with No. 3 level, 300 feet above, is being made. A concentrator of 100 tons capacity, connected with the workings by a tramway 1900 feet in length, is also in course of construction in connection with this mine.

"The Ruth lead, has a width of from four to ten feet, and strikes S. 70° W., with a dip to the south of 65°. The workings consist of a tunnel 300 feet in length, from near the end of which an upraise has been made to the surface. One hundred and fifty tons of ore, principally galena, stated to carry 120 ounces of silver to the ton, has been shipped from this mine, and considerable bodies of ore are in sight.

"The Ivanhoe, situated high up on the slope of the mountain, shows several nearly parallel veins. Two cross-cut tunnels—the upper 50 feet and the lower 90 feet in length, connected by an upraise of 70 feet—have been driven, and drifts have been extended along the lead from the ends of both tunnels for varying distances. The workings have exposed an ore-chute sixty to seventy feet in length, with a maximum width of five feet of pure and concentrating ore. A contract for a third cross-cut tunnel, 150 feet below No. 2, had been let at the time of my visit.

Mines on Reco Mtn. ridge.

"The leads on the ridge separating the South from the Middle Fork of Carpenter Creek, are crowded even closer together than those on Silver Mountain ridge. On the south slope, among others, are the Noble Five group, Last Chance, Goodenough, Reco, Deadman and Bluebird, and on the north slope the Best, Antelope, Rambler, Surprise, Antoine, R. E. Lee and Washington. The Payne, the first mine staked in the district, is situated on the crest of a spur of the same ridge.

Noble Five Group.

"The Noble Five group, consists of a string of five claims, located on the same lead. The strike is N. 60° E., and the dip is to the north-west at an angle of 45°. The lead has in places the character of a true

British Columbia—*Cont.*

fissure, and in others that of a crushed and fissured zone filled with masses of the slaty country-rock, quartz, calc-spar and spathic iron. It varies in width from a few inches to ten feet or more.

"The Bonanza King and World's Fair, two members of this group, have been worked continuously since the spring of 1892. The workings consist of five tunnels, following the lead at various depths, with a number of upraises and intermediate drifts. The three upper tunnels, which have lengths respectively of 120, 240 and 400 feet, pierce an important ore-chute from 60 to 100 feet in length, and from a few inches to six feet in width. The ore-body widens from No. 1 to No. 2 tunnel and narrows somewhat at No. 3. A fourth tunnel, at a further depth of 350 feet, is now heading towards the chute, but has not yet reached it. The ore consists mostly of galena and blende, with their decomposition-products, classed locally as carbonates, and some gray copper, native silver and a dark earthy mineral which has not yet been examined, but probably consists largely of argentite. A band of the latter in No. 2 tunnel, three to four inches in width, is stated to have averaged 1500 ounces of silver to the ton. A thousand tons of ore stated to have averaged 135 ounces in silver to the ton, has already been shipped from this mine, and the owners expect to ship a second thousand during the coming winter.

The Deadman.

"The Deadman, a parallel lead situated 400 feet east of the Noble Five group, has a somewhat similar character. The ore-body has here a length of 40 to 50 feet and a maximum width of five feet. It has been opened up by two tunnels, each about 200 feet in length, and a third tunnel 135 feet lower down has been started towards it. The ore is very high grade in character. The output of shipping ore up to the present, is stated to have amounted to about 300 tons.

The Goodenough.

"East of the Deadman, on the same slope, are the Reco and the Bluebird, accounts of which were given in last year's Summary. The Goodenough, a small but exceedingly rich lead, adjoins the Reco on the south. The ore-chute, varying in width from traces up to six or seven inches, has been followed for a considerable distance on the neighbouring Reco claim. The ore consists mainly of galena and carbonates with some ruby silver and gray copper. A shipment of ten tons of the undecomposed ore from this mine, is stated to have averaged 776 ounces, and another shipment of five tons 817 ounces of silver to the ton.

The Last Chance.

"The Last Chance, is situated above the Noble Five mine. The surface appearance of this lead was somewhat unpromising, but an incline run down on it to a distance of 80 feet, resulted in the dis-

covery of a chute of ore showing from one to three feet and a half of pure high-grade galena, bordered by several feet of carbonates and concentrating ore. The chute was followed for 40 feet, when work was stopped by water, and a tunnel is now being driven toward it at a lower level. British Columbia—*Cont*

"The claims on the northern slope, occur mostly near the heads of the various tributaries of McGuigan's Creek. The R. E. Lee, is situated above McGuigan's Lake near the crest of the ridge. This lead has a width of about three feet and follows a well-defined fissure which cuts sharply through the hardened quartzose slates and granitic dykes which form the country-rock. The vein-filling is principally broken slate with some quartz. A tunnel has been driven along the lead for a distance of 100 feet. The first 20 feet proved barren, but beyond that, a layer of ore from three to six inches in thickness resting on the foot-wall, was followed all the way. At the breast of the tunnel, ore occurs on both walls. The ore is principally a high-grade galena, shipments averaging 133 ounces to the ton in silver and 75 per cent lead. Claims on north slope of Reco Mtn. ridge.

"North-west of the R. E. Lee is the Washington. This mine has been idle for some time, but will be worked during the present season. The principal openings consist of a tunnel 300 feet in length, from which an upraise of 180 feet leads to a short tunnel above. An ore-body was struck 140 feet in from the mouth of the tunnel, and followed for 120 feet, from which 1500 tons of shipping ore and about 5000 tons of concentrating ore have already been taken. A third tunnel, 146 feet lower down, has been driven in 300 feet, and will be continued to the ore-chute and connected with No. 2 by an upraise, during the present season. A tramway 1500 feet in length and a concentrator of 50 tons capacity are also projected in connection with this mine. The Washington.

"East of the Washington is the Surprise basin, occupied by the Surprise and the Antoine claims, neither of which was examined; and still further east are the Best and Dardanelles basins. The ridge between the last two basins, is formed by a fine-grained granitic boss about half a mile in diameter, on which are situated the Best, Rambler, Antelope and Caribou claims. The granite is traversed by numerous small faults and seamed with irregular quartz-veins of all sizes, which often carry considerable quantities of tetrahedrite rich in silver. A specimen from the Antelope, assayed in the laboratory of the Survey, ran over 3000 ounces of silver to the ton. Besides the tetrahedrite, some galena, iron- and copper-pyrites and blende are also usually present. A number of the ledges in this group have been Best Basin.

British Columbia—*Cont.*

opened up by short tunnels and shafts, but no extensive development work has yet been undertaken.

Dry-ore belt.

"The North Fork of Carpenter Creek runs through what is known as the 'dry-ore' belt. The leads in this district are usually siliceous in character and carry bodies of highly argentiferous tetrahedrite, galena and other silver ores. Most of the claims are situated north of the area examined during the past year. At the Miner Boy, a fairly regular quartz-vein, from a few inches to a couple of feet in width, has been followed over 100 feet by a tunnel, and has also been traced west from the face of the tunnel for an equal distance. Some shipments of rich ore have been made from this mine, but I was unable to obtain statistics of these, as the mine was idle at the time of my visit.

"At the London group, north of the Miner Boy, the slates and associated quartzites are cut by several ore-bearing quartz-seams, ranging in size from stringers up to a foot or more in thickness. The seams have been opened up by a couple of short tunnels, and a long tunnel is now being driven in to intersect them in depth.

Claims east of main Slocan camp.

"East of the main Slocan mining camp, numerous claims have been located, both north and south of Kaslo Creek, all the way to Kootanie Lake, but only a few of these were examined. South-west from Bear Lake, is the Lucky Jim, situated on what appears to be a faulted line of contact between the slates and a brecciated band of limestone. The ore occurs in large pockets and side fissures penetrating the limestone. About fifty tons have been shipped.

Claims on South Fork of Kalso Creek.

"North of Kaslo Creek and east of Murray Creek, is the Wellington. This lead resembles somewhat that of the Alpha, and may be described as a wide crushed zone, traversing the slates in an east-and-west direction and dipping to the north. The crushed slates hold stringers and pockets of quartz, spathic iron and calc-spar. A shaft was sunk near the lead to a depth of seventy-seven feet, but was abandoned on account of the water, and the mine is now worked by tunnels. The upper tunnel cross-cuts the slates for 170 feet, and a drift then follows the lead for 100 feet. The drift has exposed an ore-chute sixty to seventy feet in length, stated to average two feet in width at the bottom of the tunnel. It was covered at the time of my visit. A second cross-cut tunnel from the surface to the lead, 700 feet in length and 160 feet below No. 1, has just been completed. The Wellington ore consists of a fine-grained galena, with blende and gray copper. One hundred and fifty tons, stated to average 250 ounces in silver to the ton, have been shipped.

"Farther east, near the head of Lyell Creek, is the Eureka, situated on a well-defined fissure cutting the green schists of the Kaslo series. The workings consist of a cross-cut tunnel 150 feet or so in length, from the end of which a drift follows the lead for 300 feet. An ore-chute twenty feet in length, from which some shipments have been made, was passed through, eighty feet from the end of the tunnel. British Columbia—*Cont.*

"On the South Fork of Kaslo Creek are the Montezuma, Daisy and Ben Hur, the first on a tributary and the two latter near the main stream. The Montezuma lead strikes about N. 30° E. At the main showing, the lead divides, one branch continuing on in nearly the same direction, while the other bends more to the south. The southern branch has a width of ten feet. The south-western one is somewhat smaller and soon narrows in. A tunnel, following ore all the way, has been driven in for a distance of about 100 feet. The ore consists principally of argentiferous galena and blende, with their decomposition-products. On the Daisy, two leads are exposed, about 100 feet apart. They strike N. 60° E. with a dip of 80° to the S. E., and are each from seven to eight feet in width. On the upper lead a shaft, following a short ore-chute adjoining the hanging-wall, has been sunk to a depth of twenty-five feet. The ore consists of argentiferous galena, blende, iron- and copper-pyrites, and some native copper. Gold assays up to $4.40 a ton have also been obtained.

"The Ben Hur, situated north-east from the Daisy, shows two leads each eight to ten feet in width, which are supposed to be a continuation of those on the latter claim.

"In the Ainsworth district, the principal mines being worked are the Highland, No. 1 and Skyline. A short description of the Highland mine, which is situated on a well-defined fissure cutting the schists of the Shushap series, was given in last year's summary. The lower tunnel mentioned there, has since been driven in to a distance of 480 feet. Ore was met with 330 feet from the face of the tunnel, and has been followed continuously for 150 feet. An upraise to the surface, along the lead, was also nearly completed at the time of my visit. A large quantity of shipping and concentrating ore is now in sight in the mine. Ainsworth District.

"The Skyline, and No. 1, occur in limestone bands associated with the Slocan slates, and are situated, the former about 200 yards and the latter about half a mile east of the granite area. The deposits worked in these mines are of a somewhat puzzling character, and would require extended study before conclusions of value could be arrived at concerning them. They appear to occupy fractured zones of con- Character of Skyline and No. 1.

British Columbia—*Cont.*

siderable but unknown width, traversing the limestones and slates in a nearly north-and-south direction, and dipping to the west. The zones have been silicified, and impregnated with ore in a selective manner, by ascending solutions.

"The ore occurs in flattened ore-bodies, occasionally ten to twelve feet in thickness, which, in the case of the Skyline, according to Mr. Scott MacDonald, the manager, often cross nearly horizontally from the foot- to the hanging-wall. The workings on the Skyline include an incline eighty-seven feet deep sunk on the lead, and a shaft farther to the west, 200 feet deep, from the bottom of which a drift 120 feet in length and an upraise of forty feet lead to the incline, and the chambers of ore at present being worked. The Skyline ore consists of a porous siliceous rock, carrying a dark mineral, probably mostly argentite, native silver and galena, along with some gray copper and iron- and copper-pyrites. It averages from forty-five to fifty ounces in silver per ton. The present output of from ten to fifteen tons per day, is shipped directly to the Pilot Bay smelter, its siliceous character rendering it valuable as a flux for the more basic ores of the district.

"The workings on No. 1, are somewhat irregular, owing to the different managements under which they have been carried out. The ore consists of a siliceous matrix, holding argentiferous iron-pyrites, native silver, galena and several other minerals which have not yet been identified. The pyrite, when separated from the gangue is stated to assay 700 to 800 ounces in silver per ton, and the galena 200 to 300 ounces. A concentrator of seventy-five tons capacity has been built at this mine, and the output, amounting to about fifteen tons daily, is mostly concentrated before shipment.

"Besides the mines mentioned above, some work is also being done in the district on the Highlander, the Lady of the Lake, the claims of the Canadian Pacific Mining and Milling Company at the mouth of Woodberry Creek and at other places.

Hendryx.

"At Hendryx, the Bluebell is in active operation. This mine is situated on a band of crystalline limestone interbedded with the Shuswap schists, which has been fractured in various directions. The ore, consisting mostly of low-grade galena and pyrrhotite with some blende, iron- and copper-pyrites, and their decomposition-products, occurs either pure or disseminated through a calcareous and occasionally a siliceous matrix. It occupies irregular chambers in the limestone, some of which are of huge dimensions. The ore-body being worked at present, including some large horses of limestone, measures approximately 70 feet in width by 200 feet in length and 150 feet in height. Forty thousand

tons of pure and concentrated ores have been shipped from this mine during the year, and prodigious quantities remain in sight. British Columbia—*Cont.*

"The Toad Mountain district was not visited during the season. A Halliday wire-rope tramway, four miles and a half in length, leading from the Silver King mine to a flat near Nelson, has been constructed here by the Hall Mines Company, and a Fraser & Chalmers 100-ton blast furnace will be completed, so I was informed by Mr. Croasdaille, by the end of the present year. (1895.) Toad Mountain.

"Before returning east, a brief visit was made to Trail Creek. A short account of the geology and principal mines in this district was given in last year's report, but since then great progress has been made. The number of working mines has been largely increased, the known area of the mineral belt extended in all directions, a well-built town of 2000 or more inhabitants has sprung up near the mines and a second town is being built near the mouth of Trail Creek. Cursory examinations of some of the working mines were made, but of too general a character to add much to previous knowledge, and as part of the coming season will probably be spent in this district, it would be injudicious here to enter into much detail. The greater part of the mines are situated on an eruptive area, which appears to consist largely of diorites and uralite porphyrites cut by numerous dykes. The eruptive area is traversed, in an approximately east-and-west direction, by lines of fracture dipping to the north and holding ore-bodies ranging in size from mere stringers up to great lodes 30 feet or more in width and from 100 to 200 feet in length. The ore consists mostly of gold-bearing pyrrhotite and chalcopyrite, but mispickel, galena, blende, pyrite and other minerals also occur. Trail Creek.

"Work on the Leroy and War Eagle, the two principal mines of the camp, has been actively prosecuted during the year with highly satisfactory results. The shaft on the Leroy is now down over 380 feet, and the lode followed appears to be strengthening with depth. At the 350-foot level, the ore-chute has a length of 168 feet and a width, at one point, of over 40 feet. The result of the workings on the Leroy, the pioneer mine of the camp, has inspired confidence in the permanency of the numerous other less developed lodes in the district. Principal claims.

"At the War Eagle, which is worked by tunnels, the great yield of the past season, amounting to many thousands of tons of rich ore, has been taken mostly from a stope on the main ore-body between the first level and the surface. A second tunnel over 800 feet in length and about 100 feet below No. 1, is now nearly completed to the chute, and a third one, which when finished will have a length of 1800 feet,

British Columbia—*Cont.*

has been started. At the Josie, a tunnel following the lead has been driven in to a distance of 330 feet, and three ore-bodies have been opened up, the further one of which has a length, to the breast of the tunnel, of 128 feet. Considerable work has also been done in this vicinity on the Cliff, the Nickle Plate and the Centre Star, and farther to the east important ore-bodies have been developed on the Iron Horse, the Kootanie, the Columbia and numerous other points.

"South of Trail Creek, development work is being pushed, among other claims, on the Crown Point, where a wide body of rich ore has been followed to a depth of 65 feet, and on the R. E. Lee. West of these are the Homestake, the Deer Park and a number of other important claims.

Machinery employed.

"The large amount of work being done, or in contemplation, in this district, is illustrated to some extent by the following list of machinery, part of which is in active operation and the remainder ordered. This has been kindly furnished me by Mr. J. D. Sword, agent at Rossland for the Ingersoll Rock Drill Company.

"At the Leroy, one 7-drill compressor and eight Ingersoll drills, two hoisting engines, three boilers (100 h.p., 80 h.p. and 40 h.p.) One diamond drill.

"At the War Eagle, one 20-drill compressor, ten Ingersoll drills, two 100-h.p. boilers.

"At the Josie, one 7-drill Ingersoll compressor and drills, also diamond drill and hoisting engine.

"At the Centre Star, one 7-drill Ingersoll compressor and drills, 80-h.p. boiler.

"At the R. E. Lee, one 30-h.p. boiler, Ingersoll hoisting engine and steam drills.

"At the Iron Horse, one 5-drill Ingersoll compressor, drill and pump.

"At the Columbia and Kootanie, one 30-drill Ingersoll compressor and drills.

"At the Nickle Plate, one hoist and Knowles pump.

"Sampling works of 200 tons capacity, and a matting plant of 125 tons capacity, are also being erected by the British Columbia Smelting Company near the mouth of Trail Creek.

Metallic minerals found.

"The following is a list of the metallic minerals which have been recognized so far in the West Kootanie district:—Native gold, native silver, native copper, native arsenic, galena, cerrusite, anglesite, altaite, argentite, pyrargyrite, proustite, chalcopyrite, chalcocite, bornite,

tetrahedrite, malachite, hæmatite, limonite, siderite, blende greenokite, stibnite, jamesonite, mispickel. British Columbia—*Cont.*

"In conclusion, I must express my thanks to the various mine owners and managers in the district for permission to visit the different mines, for information, and for many other courtesies."

Work by Mr. McEvoy.

In the early part of the year, Mr. J. McEvoy was chiefly occupied in the compilation of parts of the Shuswap map-sheet, British Columbia, employing for that purpose data obtained during the previous summer. Before leaving for the field, about one-half of the area of this sheet had thus been laid down. The field-work of the season was devoted to the area of the same map, in which further surveys and examinations were carried out, such as to nearly complete the required data. There remains, however, some rugged mountain country in the north-east corner of the map, and a geologically complicated tract in the south-west corner, both of which it may be desirable to investigate further before the publication of the sheet.

Mr. McEvoy left Ottawa for the field on the 6th of June and returned on the 21st of October. The work accomplished is described by him as follows:—

Examination of Shuswap sheet.

"Leaving Kamloops with pack-horses and supplies, my first work was the examination of Louis Creek valley and adjacent mountains, where the distribution of the Cambrian rocks was investigated. A squeezed serpentinous agglomerate was noticed capping the mountains north of Fadear Creek, which will probably prove to be a local variation of the Tod Mountain rocks.

"Proceeding to Shuswap and thence northward, the region north of Shuswap Lake was visited and the boundaries of the granite area on Scotch Creek were traced out. The examination of this country was carried on as far as Lee Creek, the next creek above Ross Creek, beyond which the rocks are exposed on the lake shore and were seen by Dr. Dawson last season.

"Salmon River country was next visited, the return being made by way of Shuswap. Some outlying areas of Tertiary volcanic rocks were traced out and the granite boundaries were ascertained.

Gypsum deposit.

"On the hillside north of the middle crossing of Salmon River, there is a fine deposit of gypsum, associated with gray schists and white crystalline limestone. The principal deposit, in which a tunnel twenty-five feet long has been made, is one hundred feet and over in thickness. The exact thickness could not be ascertained on account of the heavy cover-

British Columbia—*Cont.*

ing of drift on the hillside. Above this is another deposit, with a thickness of thirty feet or more, still higher up are two more small deposits, one of which shows bedding. The large deposit is massive and perfectly white in some places, showing slight traces of anhydrite. The general strike of the deposits is east-and-west, true, with vertical or high northerly dip.

"At Salmon Arm, the boundaries of the granite composing Granite Mountain and its extension eastward were traced out, and at Canoe Creek a considerable extent of Cambrian rocks was found, running eastward as far as the Spallumcheen Valley.

Region north-east of Vernon.

"Proceeding toward Vernon, a few points were visited to define granite boundaries on the west side of the valley, where the granite is in contact with black argillite. From Vernon, the B. X. Creek was ascended and the mountains crossed over to Trinity Valley. A great thickness of argillites and grauwackes is developed here. The descent to Trinity Valley was through a wind-fall of heavy larch timber necessitating much chopping and making progress slow. Trinity Valley lies north-and-south and is situated, roughly speaking, midway between the valley of Mabel Lake and the Spallumcheen Valley, and approximately parallel to these valleys. The valley is quite wide, over three miles in the widest part, and a number of settlers have lately taken up land in it.

"A trip was made into the foot-hills of the Gold Range on the east side of Mabel Lake, following the watershed between Mabel Lake and the Upper Shuswap River (above Sugar Lake). These mountains proved to be composed of rocks of the Shuswap series.

"The North Fork of Cherry Creek and vicinity was next visited, and further evidence as to the extent of the argillite area in that neighbourhood obtained. Harry's Creek and some other points in White Valley were also examined.

Shuswap River.

"Returning to Enderby, the survey of Spallumcheen or Shuswap River from 'the islands' up to Mabel Lake was completed, by means of a canoe. The river is quite shallow in places, being divided by bars and islands. At low water an ordinary log canoe touches bottom on some of the 'riffles.' Two miles below the lake, a portage-route one and a quarter mile long begins. At the head of this a large stream flows into the river from the north.

"Between the northern end of Trinity Valley and Mabel Lake, a new area of Tertiary volcanic rocks, underlain by shales and sandstones, was found and traced out.

"On the return journey to Kamloops, some work was done near Round Lake and Monté Lake. At Campbell's Creek a day was spent in ascertaining the boundaries of the Tertiary rocks and the granite and argillites of that vicinity. British Columbia—*Cont.*

"The amount of agricultural land still unclaimed has frequently been mentioned in previous reports. Much still remains, notably, along the north shore of Shuswap Lake at Lee Creek and Ross Creek. This land has mostly been burned over more than once, and could easily be cleared for cultivation. Irrigation would not be necessary on the greater part of it. Between Enderby and Salmon Arm also there is still unclaimed land which is suitable for settlement. Agricultural lands.

"The Chinese are still engaged on a small scale in placer mining on Scotch Creek and Cherry Creek. During the summer hydraulic mining was commenced on a small stream a mile and a half south of the lower crossing of Salmon River." Placer mining.

MANITOBA AND KEEWATIN.

Mr. J. B. Tyrrell reached Ottawa on 16th January, 1895, after completing a second traverse of the "Barren Grounds," as briefly mentioned in last Summary Report. He was occupied during the remainder of the winter, and until July, in preparing a report on the whole expedition and a map of the route followed. Work by Mr. Tyrrell.

On the 5th July, Mr. Tyrrell left Ottawa for the purpose of examining that portion of Manitoba and Keewatin lying east and north-east of Lake Winnipeg and drained by streams flowing into that lake or into the upper part of the Nelson River. It was considered advisable to ascertain the geographical and geological features of this tract of country, as it is comprised within the area of a map-sheet in course of preparation. This sheet embraces Lake Winnipeg and its vicinity, already geologically surveyed by Mr. Tyrrell and Mr. D. B. Dowling. Mr. Tyrrell returned to the office on the 19th October. Country east of Lake Winnipeg.

He reports on the work done as follows :—

"On Saturday, 13th July, I arrived in West Selkirk, and shortly afterwards engaged as canoemen Roderick Thomas, and John Harper, two of the men who had accompanied me in 1894, down Kazan River, through the Barren Grounds, to the west coast of Hudson Bay. A cedar canoe, ordered from the Peterborough Canoe Company, had not yet arrived, but Sir John Schultz, then Lieutenant-Governor of Manitoba, kindly placed a large bass-wood canoe at my disposal. The Journey north from Winnipeg.

Manitoba and Keewatin—*Cont.*

remainder of that day and Monday, were spent repairing and painting this canoe, and obtaining necessary supplies for the season. On Monday evening, however, word came from Winnipeg that my cedar canoe had reached there, and would be in Selkirk by the next train on Wednesday morning. Fortunately, the steamer 'City of Selkirk' was leaving for the north on the same day. On Wednesday afternoon we left the wharf and started down the Red River, and at five o'clock the next evening, after a quick and pleasant run over Lake Winnipeg, we reached Selkirk Island, twelve miles north-east of the mouth of the Saskatchewan River. On Friday evening, July 19th, we were towed north-west for about twenty miles, after which we paddled our canoe around the north shore of Lake Winnipeg, reaching its outlet into Nelson River, where the exploratory work of the season was to begin, late on Saturday evening.

Great Playgreen Lake.

"During the first half of the following week, a survey of Great Playgreen Lake was made with a boat-log and compass. The north-eastern shore is entirely underlain by Archæan granites and gneisses, while the south-western shore is composed of the stratified post-glacial clays, which form the long, narrow point separating that lake from Lake Winnipeg. Nelson River issues from Great Playgreen Lake in several channels. The most eastern channel we descended and surveyed past the mouth of Gunisao River to Rossville Mission on the latter lake.

Gunisao River.

"Here an Indian was engaged to accompany us up Gunisao River. Near its mouth, it winds without perceptible current through an extensive marsh, with a width of from fifty to one hundred yards. The water is of a dark brown colour and slightly murky. Up to the Forks, a distance of about eighteen miles, the banks are low and but scantily wooded, with a few rounded bosses of gray gneiss rising here and there. The stream is interrupted by four rapids, past two of which are portages, respectively 100 and 185 yards in length.

"Above the Forks, the south branch is the larger. This was in the first place ascended, for six days, through Gunisao Lake, to a small lake above. Many rapids obstruct the stream, up some of which the canoe was hauled with a line, while past twenty-two of the most serious it was necessary to carry the canoe. For about fifty miles above the Forks, the river flows through a clay-covered country sloping gently towards the north-west, and has cut a channel or valley varying in depth from six to twenty-five feet. In places it has cut down to the underlying granite or gneiss, which then usually forms a barrier over which is a fall or rapid. Between these rocky rapids is slack water, and rock-exposures are infrequent, and where seen are constantly of gray or reddish-gray granite.

"The banks are wooded with beautiful, tall, white spruce, apparently forming a magnificent coniferous forest, but how far back from the river this forest extends, was not determined. There is certainly here a large quantity of valuable timber, much more than was seen anywhere else in the country immediately east of Lake Winnipeg, for most of the surface further south has been swept by extensive forest fires within the last decade. Manitoba and Keewatin—*Cont.*

"In the upper half of the river, the banks are low and much less clearly defined. Deep bays, filled with wild rice, extend between the rocky knolls back to swamps, wooded with tamarack and small black spruce, generally killed by fire.

"Gunisao Lake was reached on the first of August. This is a lake of clear cold water, with irregular contour, about thirty-two miles in length, and with steep, almost bare rocky shore of gray granite. The rowan bush was seen growing on some of its many rocky islands. Gunisao Lake.

"On descending the south branch again to the Forks, the Indian hired at Rossville mission refused to accompany us up the north branch, so he was put ashore among some of his friends who happened to be passing, and the river was ascended without his assistance.

"The channel is almost as large as that of the south branch and carries about two-thirds as much water, but the banks, in the lower part at least, are rather more rocky and barren, and almost all the timber has been destroyed by fire.

"The north branch was ascended for three days and a half, to its source in a narrow lake ten miles long, from which there is said to be a good canoe-route across the height-of-land eastward to Island Lake. There are but ten portages on this river, but for long distances the current is very swift, and the river has not yet cut for itself a channel of any considerable depth. Throughout its whole course from the long narrow lake to its mouth, the river flows through a level, clay-covered country, the rock merely rising here and there in knolls and ridges above the general level. North Branch of Gunisao River.

"After the survey of this river was completed, we paddled down the stream to its mouth, and then to Norway House, where we were delayed for several days by heavy winds, but the time was spent in refitting the sail-boat 'Pterodactyl' that had been brought out last year to await our arrival from the north, and was now to be used in travelling southward down the east shore of Lake Winnipeg.

"On the 20th and 21st August, accompanied by Mr. R. Strath, of Rossville mission, we made a survey of Little Playgreen Lake. The Little Playgreen Lake.

Manitoba and Keewatin—*Cont.*

rock is generally a very uniform gray granite, although at one place, near the south end, it is associated with a dark rather coarse-grained massive diorite, and near the north end of the lake, it is cut by veins of red pegmatite containing crystalline aggregates of molybdenite.

Black River.

"From Norway House, where we had been kindly welcomed by Mr. J. K. Macdonald, we sailed southward to the mouth of Little Black River. Here, leaving the sail-boat at anchor, and taking a week's provisions in the canoe, we began the ascent and survey of Little Black River. For twelve miles, up to the first portage, the river is from sixty to one hundred yards wide, with clay banks six to fifteen feet high, wooded with white poplar and small black spruce. A low outcrop of gray granite may be seen here and there. The water is dark-coloured and muddy. Above this portage, the river has a width of from thirty to fifty yards.

"We continued our journey up the river for three days, during which time we made twenty-one portages past as many rapids, besides ascending numerous other rapids with line or paddle. The river was found to rise not far from Gunisao Lake, and there is said to be a practicable canoe-route in high water from it to the lake, but the water was now so low that it was impossible to ascend so far with our canoe. The current was often swift, and the channel crooked and overhung with willows. The banks are everywhere composed of stratified clay or silt, and much of the country had been well wooded, but unfortunately nearly all of the timber has been destroyed by fire in comparatively recent years. Some small trees of Manitoba maple *(Negundo aceroides)* were growing by one of the lower rapids. The rock, wherever seen, was a uniform gray granite.

"From the mouth of Little Black River, we sailed southward to Berens River, but a heavy storm drove us in to Poplar River, and detained us there for several days. At Berens River, we engaged an Indian as steersman, and on Monday, 9th September, we paddled southward to the mouth of Pigeon River, and began the ascent and survey of that river.

Pigeon River.

Pigeon River flows into the lake in a deep channel, a hundred yards wide, between sandy points, above which it opens into a shallow weedy lake. Around the sides of this lake were beds of wild rice, then almost ripe, on which great flocks of wild ducks were feeding. The channel gradually narrows and becomes well defined at a little rapid, where it is about forty yards wide, above which it again expands to a width of from sixty to a hundred yards, with even clay banks, six to ten feet high, wooded with tall white poplars. Low bosses of gray gneiss outcrop here and there, on which are growing small groves of oak.

"The ascent of the stream was continued for six days, and on Saturday evening we reached the Hudson's Bay Company's trading-post at Grand Rapids. The work of ascending the stream had been rather slow and difficult, for the Indians rarely travel on the river, and the twenty-nine portages that we were obliged to make were often through dense burnt forest and over innumerable fallen trees. In its lower part, the banks are chiefly composed of stratified clay or sand, and the channel is even and well defined, but higher up the banks are of gneiss or pebbly till. Manitoba and Keewatin—*Cont.*

"From Grand Rapids Lake, Pigeon and Berens rivers, two streams of about equal size, flow westward towards Lake Winnipeg, the former discharging from the south, and the latter from the west side of the lake. Large pot-holes.

"On Monday morning the return journey to Lake Winnipeg was begun down the Berens River. Just below a little rapid with a drop of thirty inches, at the west end of Long Lake, is a granite hill, on the south-east side of which, facing up the river, is a group of seven large pot-holes, besides several smaller ones. The most perfect is thirty-three inches in diameter and ten feet deep, with the top of the rim eight feet above the water at its base, or five feet and a half above the water of Long Lake. Some of the others have been partly cut away, and the smooth rock faces are strongly scored by glacial marking, showing that the pot-holes are of pre-glacial or inter-glacial age, when the water flowed in a direction more or less opposite to the course of the present river.

"A short distance below Pot-hole Portage, a small sluggish brook flows into Berens River from the north. This brook was ascended to a little shallow lake, almost choked with luxuriant beds of wild rice. Near the east end of this lakelet, we entered a small crooked brook which winds through marsh and willow swamp for about three miles to a rocky barrier eight feet high, over which the water flows in its higher stages earlier in the season. Crossing this rock by a portage fifty yards long, we begin the descent of what is now the Etow'-imā'-mi River. At the next portage, the water runs in a rill a few inches in width. The narrow, winding, but constantly increasing stream was then descended for about thirteen miles, between banks of rock and light gray pebbly till, to a series of heavy rapids, just below which is a well-defined sandy terrace, marking the highest shore-line of the glacial Lake Agassiz seen on the east side of Lake Winnipeg, and the eastern limit of the lacustral deposits. This limit had been determined on several of the other streams flowing into the lake, but nowhere was it so distinctly marked as here. Below this sandy terrace, the Etow'-imā'-mi River.

Manitoba and Keewatin—*Cont.*

river was followed downward for two days, between wooded banks of stratified lacustral sand and clay, to the point where it empties into Berens River seven miles above its mouth. The rocky bosses seen here and there were everywhere of uniform granite and granitoid gneiss.

Blood River.

At the mouth of Berens River, the sail-boat was sold to Mr. William Flett, and we proceeded southward in our canoe to the mouth of Miskowow or Blood River, where an Indian was engaged to accompany us up the river. The ascent of the stream was begun on September 28th. Miskowow River, near its mouth, averages from forty to fifty yards in width, with water of a slight brownish tinge but not dark-brown like most of the other rivers east of Lake Winnipeg, indicating that it is derived chiefly from lakes of considerable size, in which the water has been cleared of its dark colouring matter. The banks are not very high, but are usually rocky, and the water often seems to flow in a preëxisting rocky channel. Between the rocky knolls and ridges, the blue, stratified, lacustral clay that is seen everywhere in the lower country east of Lake Winnipeg, forms well-defined level land, thickly wooded with white poplar, while the rocky knolls are thickly wooded with Banksian pine and oak.

"At the fourth portage up the river, three pot-holes, similar to those on Berens River, occur on the summit and south-west side of a granite knoll, and further up the river, above the ninth portage, and about half-way between the mouths of Mine'go and Little Miskowow rivers, a large pot-hole has been bored in the steep eastern side of a granite hill, the surface of which is now strongly scored by glacial markings. the river was ascended to Kowtinagan (or perch-dish) Lake, and then descended again for a short distance and the north branch ascended to Sasaginigak Lake, an irregular body of clear water lying in the midst of low hills of gray granite. From this lake there is said to be an easy canoe-route northward to Grand Rapids on Berens River.

Return to Selkirk.

"After the survey of this lake was completed, the river was again descended to Lake Winnipeg, which was reached on the 4th of October. On the following day we were taken on board one of the steamers running on the lake and carried to Selkirk, where we arrived on the evening of October 6th, just as a heavy snowstorm set in. The canoe and outfit were stored at the Government fish-hatchery, the men were paid off, and on Tuesday, October 8th, I started for Winnipeg and the east.

General character of country.

"The country explored was found to be almost entirely underlain by granites and granitoid gneisses of Laurentian type. A very interesting feature is the occurrence over a very large area, of massive granites

characterized by plagioclase felspars. These granites and gneisses are generally overlain by stratified clays and silts up to a height of about a hundred and fifty feet above the present level of Lake Winnipeg. Much of this area will undoubtedly prove to be excellent farming land, more especially since the nearness of the great body of water in Lake Winnipeg will largely prevent the occurrence of summer frosts. Much of the timber that once covered the country has, unfortunately, been destroyed by forest fires, but there is still some excellent white spruce on the banks of Gunisao River." Manitoba and Keewatin—*Cont.*

Ontario.

(With adjacent parts of Quebec.)

Mr. W. McInnes, after writing a preliminary report on the Lake Nepigon region, explored the previous season, devoted the winter of 1894–95 to getting together the materials for a report on the region covered by the Shebandowan and Seine River sheets, of the series of geological maps now being prepared of Western Algoma. For the geological colouring of a large part of the last-mentioned sheet, the notes and specimens collected by the late W. H. C. Smith, who had the work in hand at the time of his death, had to be carefully gone over, and the report on this section must to a certain extent be based upon these. Work by Mr. McInnes.

On May 24th, or as early in the season as appeared practicable, Mr. McInnes proceeded to the Rainy River and Thunder Bay districts of Ontario, for the purpose of continuing work upon the map-sheets above mentioned, and in other neighbouring areas, to which much attention has lately been attracted in connection with gold mining. He was assisted, as in former years, by Mr. W. Lawson, who attended to a great part of the surveying work. The following preliminary report on the results obtained is given by Mr. McInnes :—

"The early part of the season, until the 10th of July, was spent in the region lying to the east of Rainy Lake. Calm or Nonwatin Lake, on the lower part of the Seine River, was first visited, and the country about it geologically examined for the purpose principally of defining more closely the Keewatin (Huronian) areas in that region. With this object in view, the smaller lakes and streams in the vicinity were surveyed, and additional information was gained of the distribution of the gold-bearing Keewatin rocks. This information has been incorporated in the geological map, of which a preliminary edition has since been published. Region east of Rainy Lake.

Ontario—*Cont.*

"With the same object in view, a track-survey was made of the Little Turtle River to Dovetail Lake and thence to the Seine River. Many gold locations have been taken up in the district, particularly in the region lying immediately to the east of Bad Vermilion Lake, which is included in the Rainy Lake geological sheet, already published. In this neighbourhood two stamp-mills have been erected, but attention was wisely being directed chiefly to sinking on the properties to prove the extent and value of the veins. At Harold Lake, a five-stamp mill was in operation, and the owners report satisfactory results in free gold, with promise of further profits from treatment of the tailings, for the handling of which they are not yet provided with machinery. Development work was being carried on upon a number of veins on this property.

Stamp-mills.

Manitou region.

"The Manitou region was then visited, and surveys were made there which occupied the time until early in September. The eastern shores of Manitou Lake and a number of small lakes adjoining were first surveyed. Rocks of the Keewatin were found to occupy the whole of the immediate shores of the lake, consisting of green chloritic and other schists with areas of massive diorites, etc. A great thickness of conglomerates and agglomerates, with a schistose, felspathic matrix and well-rounded pebbles of quartzite, felsite, banded chert, impure magnetite, quartz and occasionally of gneiss, occupies the eastern shore of of the main lake from Beaver Narrows to the head. Irregular belts of the same conglomerates are interbedded with the schists on many of the islands in the lake. Near the north end of the lake, the gneisses approach within a mile of the eastern shore, trending away from the shore southwards, being distant about four miles opposite the Narrows and approaching the lake again to within two miles opposite Sand Point. A route from Manitou Lake southerly to Rainy Lake by way of Crooked and Round lakes was then surveyed. The north-east branch of Kahopskikamak River was ascended to its headwaters, and surveys made of Eagle Rock, Narrow and Small Trout lakes. Hornblende gneisses were found to occur all along this route. This is the gneiss area above referred to, which comes close to the eastern shore of Manitou Lake near the head.

"A route was next surveyed west of Manitou Lake, from Pipestone Lake northward through Yoke, Route, Arm, Lawrence, Hill and Rowan lakes and back to Pipestone by Bass Lake and a number of smaller lakes. The Keewatin area of Crow and Pipestone lakes was found to extend northwards to the western arms of Lawrence Lake. Rowan and Hill lakes were found to lie entirely within this Keewatin belt. The biotite-gneiss belt which approaches the western shore of

Manitou Lake, occupies almost the whole of the shores of Lawrence Lake, the contact trending north-easterly near its western end. Ontario—*Cont.*

"The remainder of the season was devoted to sheet No. 9 (Lake Shebandowan sheet), where surveys were made of short routes north and south-east of Dog Lake, for the purpose of adding to the topographical details of that region and of gaining a closer knowledge of the structure of the gneisses which occur everywhere about Dog Lake. Surveys on Shebandowan sheet.

"Short trips were made by Mr. Lawson from Buda, Kaministiquia, Murillo, and Kakabeka stations, and the line of the Canadian Pacific railway was examined between Carlstad and English River.

"The gold in the region explored seems to be confined, or at least its occurrence in commercial quantities, to the belts of Keewatin (Huronian) rocks, which, with many minor deflections and diverging arms, extend eastward and north-eastward in broad bands inclosed in the Laurentian gneiss. The areas of these rocks open to the prospector, though limited on the United States side to the southern margin of Rainy Lake, are very extensive on the Canadian side of the boundary, extending from Rainy Lake easterly through the districts of Rainy River and Thunder Bay. The occurrence of gold throughout this whole area is now established, and during the past season a discovery of promise was made in rocks of the same class at Jack-fish Bay on the north shore of Lake Superior. The greater part of the actual development and mining work, has been so far confined to the region lying about Bad Vermilion Lake, near the mouth of the Seine River, where the first finds were made on the Canadian side. In this neighbourhood, almost all the land lying between Shoal and Bad Vermilion lakes has been taken up in gold locations. Two mills have been erected in this area, at Hillyer's and at Weigand's, and testing shafts have been sunk on a number of the properties. Work in this direction is still going on and the prospects for the establishment of permanent mines seem good. Gold mining in progress.

"At Rainy Lake, two mills of ten stamps have been built on the United States side, one at the Little American Mine on the outlet of Back Bay and the other at the Lyle Mine on Dryweed Island just south of the boundary line. Neither of these mills were being worked at the time of my visit, but the power was being used for operating drills in the shafts. At the Lyle, a shaft was down 75 feet at that time. It was sunk in a belt of quartz-schist, chloritic and sericitic in layers, and with irregular, small veins, stringers and lenses of quartz, the whole pretty thoroughly impregnated with iron-pyrites and stated to carry gold in good quantity. Nearly opposite, on the Canadian side, a small amount of work had been done on Sand Point Island, on a well Mines and mills near Rainy Lake.

Ontario—*Cont.*

mineralized vein about four feet in thickness, in chloritic schist, cut by a dyke or mass of diorite. The vein was not traced on the strike for any distance.

"The Little Canada, on a small island near by, is a contact deposit, where a coarse diabase with blebs of opalescent quartz cuts chloritic schists. Stringers and lenses of quartz occur near the contact and the general mass of the rock for several feet is well impregnated with iron- and copper-pyrites. Assays giving good returns in gold are reported by the owners of these properties.

Prospecting on Seine River.

"Prospecting work has extended for some distance up the Seine River, though only in a rambling sort of way, indeed the immediate shores of Rainy Lake and the lower Seine River, with the area already referred to about Bad Vermilion Lake, are the only areas which have yet been gone over with any thoroughness. In the vicinity of Sturgeon Falls, on the Seine River, a number of properties have been taken up, as well as further on at Nonwatin or Calm Lake and in the region surrounding it. On most of these properties some preliminary stripping work has been done. Still further to the eastward, prospecting work of an even more scattered character has been carried on, and gold properties have been taken up as far in that direction, on the Seine River belt, as Star Island and Partridge Lake.

"On an arm of this Keewatin belt, stretching north-easterly towards the Canadian Pacific railway and reaching it at Carlstad station, properties have also been taken up at Lynx Falls and Saw-bill Lake, lying to the east of Clearwater Lake. These properties show free gold, and good assays have been obtained from surface specimens. Only preliminary surface stripping has been done on them.

Huronian mine and vicinity.

"On another belt of similar Keewatin rocks, further to the east and south, and separated from the Seine River belt by a band of gneiss about ten miles in width, is situated the Huronian mine and neighbouring properties on the same vein. This was equipped with the necessary buildings and machinery, but operations have been suspended since 1885. Following the opening up of the Huronian mine, upwards of one hundred gold locations were taken up on the belt extending north-easterly from the mine, along the strike of the schists and along both shores of Upper Lake Shebandowan. With the exception of the Huronian, little work has been done on any of the properties recorded at that time. Recently renewed attention has been given to this area, and gold properties have been located as far east as Gold Brook, a tributary of the Matawin River.

"In the region about the easterly end of Rainy Lake and extending up the Seine River, more than five hundred locations had been taken up. Ontario—*Cont.*

"Though extensive deposits of magnetic iron-ore of high percentage have been recorded along the Atikokan River, beyond testing with the diamond drill and some preliminary stripping, no mining work has been done. Iron ores.

"Further east, south of Finmark station on the Canadian Pacific railway and near the Matawin River, are other deposits of iron, which have been stripped and tested pretty thoroughly by the diamond drill, but although the deposits are promising enough, actual mining has not yet begun. Further deposits of iron have been located at various points along the different Keewatin belts, but nowhere else has any considerable work been accomplished.

"The occurrence of gold has now been established over practically the whole district lying between Lake of the Woods and Lake Superior, confined, however, as far as our present experience goes, to the belts of Keewatin (Huronian) rocks. It occurs throughout these belts in impregnations of bands of the country rock, in parallel sets of bedded or interfoliated segregation veins, and in well-defined fissure-veins which cut the containing rocks without regard to the direction of their foliation. Any of these forms of occurrence might under proper conditions constitute good paying properties. General distribution of gold.

"The discovery during the past summer of a gold-bearing vein which promises well, at Jack-fish Bay, on the north shore of Lake Superior, is interesting, as it occurs in rocks which we believe to be practically a continuation of those of the district under consideration."

Mr. E. D. Ingall spent a considerable part of the summer in the investigation in the field of the deposits of iron-ores in the country traversed by the Kingston and Pembroke railway. The circumstances under which this work was taken up have already been explained. In company with Mr. Ingall, I visited Kingston for the purpose of conferring with the gentlemen interesting themselves in the initiation of iron-smelting in that vicinity. We then together visited some of the best known mines, and subsequently Mr. Ingall (on August 13th) began a more detailed examination of the points already visited, as well as of many other known deposits of ore, which was continued until October 28th. On the work accomplished, Mr. Ingall reports as follows:— Work by Mr. Ingall.

"The main questions upon which it was desired to obtain further information were as follows:— Questions to be answered.

Ontario - *Cont.*

"The quantity of available ore from immediately accessible localities?

"The quality of the same?

"The first question, for its solution requires a correct understanding of the nature of the deposits of the district, and, therefore, of their reliability as to continuity in length, depth and thickness. This is more particularly the case owing to there being no mines at present working from which to judge of the behaviour of the deposits in depth. At a number of places extensive openings have been made, but work has been discontinued throughout the district for several years, and, the excavations being now filled with water, nothing but the surface features remain available for the study of the question.

"It is thus evident that, using the term 'ore in sight' in its proper sense, at none of the places visited were the conditions such as to allow of measurements being made of the cubic contents, and therefore of the tonnage of any block of ore, unless one assumed or imagined, at least one of the three dimensions necessary to be ascertained. At some places there was found to be a stock-pile of ore selected from the material mined; but, apart from that, the question of available ore becomes one of judging, in a general way, the possibilities of the supply from deposits already discovered and worked, and of the probability of discovering yet other deposits throughout the district in the future.

Ore deposits visited.

"In order to form an opinion on these points, visits were made to as many as possible of the reported deposits of iron-ore, to the number of over forty, where, besides examining all openings, measuring all ore exposures and collecting illustrative specimens, both of area and rocks, surface surveys were in many places made, as well as readings with the dip-needle. The points visited, including many reported hæmatite occurrences, were as follows:—The Bluff Point and Calabogie mines of the Calabogie Mining Company; the Coe Mine; the Martel, or Wilson; the Culhane; the Williams or Black Bay, and the Lerond mines, all in Bagot township, and within a radius of three miles of Madawaska station on the Kingston and Pembroke railway; the Radenhurst and Caldwell properties in Lavant township and near Flower station, and in the same township the Wilbur mine; the Robertson and Mary mines near Mississippi station in Palmerston township, all situated near the line of the Kingston and Pembroke railway north of Sharbot Lake. Between this point and Kingston, the mines of the Zanesville group were visited, namely, the Zanesville or Glendower mine; the Howe mine and the Black Lake mine. Of the district tributary to Kingston, by way of the Rideau Canal, time only permitted visits to the two chief places, viz., the Chaffey and Yankee mines near Newboro'.

Frontenac county.

"In the south-western corner of Lanark county, the mines visited were the old Foley mine openings with those adjacent to it, and several reported hæmatite occurrences in Bathurst township. In Dalhousie township visits were made to the old Playfair hæmatite mine and to a number of reported indications of the same mineral in that vicinity, as well as to one on the eastern shore of Dalhousie Lake. Lanark county.

"In the township of South Sherbrooke, the mines visited were the Christie's Lake; the Bygrove; the Fournier (with the adjacent Allen mine in North Crosby); the Silver Lake and others near Christie's Lake, whilst near Maberly on the Canadian Pacific railway, in the northern part of the township, examination was made of the range of properties, taken up for iron, extending from near the station westward to the property of Mr. Rudd in Ose township. Although somewhat distant from the present railway communications, a trip was made to the Yuill mine near the eastern end of White Lake in Darling township. The above, together with reported hæmatite occurrences in Storrington township on Dog Lake, which connects with the waters of the Rideau canal, on Birch Lake in Bedford township, and some other points of lesser importance, constitute the examples it was found possible to visit in the time at disposal. South Sherbrooke.

"The geology of this part of Ontario has already been reported upon by the Geological Survey. In the Geology of Canada, 1863, and in the Reports of Progress for 1870-71, 1871-72, 1872-73 and 1874-75 particulars will be found of the results of the investigations made by former officers of the staff.

"In a general way the rocks of the district can be described as a series of schistose and gneissic beds with interspersed belts of crystalline limestones, which latter often persist for miles. The schistose rocks may be roughly classed as micaceous and hornblendic, whilst more basic rocks, probably dioritic in nature, are also frequent. A definite opinion as to the relationships of these more basic rocks to the rest of the series could not of course be based upon the present work, so that nothing further can be said as to whether they are merely basic members of the series or intrusive masses in it. The series seems to have a very general dip southward over the parts visited, often at quite low angles. To the south it is overlain unconformably by the basal beds of the Cambro-Silurian formation, represented by the basal conglomerates and false-bedded sandstones of the Potsdam with the overlying limestones at Kingston. Rocks of the region examined.

"Although the ores mined in this district so far, have been almost altogether magnetites, in the past the Dalhousie or Playfair mine

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shipped hæmatite for several years, and at many points in the district similar ore is reported as occurring, although it has nowhere else been developed to any extent.

Nature of ore-deposits.

"*Magnetite.* It would be premature to pass any final opinion upon the exact nature of the deposits, previous to the thorough examination and working out of the specimens and other data collected, but in speaking of the district in general and its probable future ore-producing capacity, a correct judgment could not be formed if one ignored the fact that the deposits are irregular in their nature. It would seem as if, so far, this feature had hardly been recognized sufficiently, and thus we find most observers in the past assuming that the ore occurs in beds and therefrom erroneously inferring the continuity of the ore-bodies between widely separated outcrops, and in some cases forming thus most exaggerated estimates of the amount of ore which could be taken as proved to exist.

Erroneous ideas concerning these.

"Then also in using the dip-needle, this same error would appear to have been frequent. If, for instance, on a given run of rock or direction across country, a few high dip-readings were obtained in a distance of several miles, it would be assumed as proved that a continuous bed of ore exists, only requiring sinking on it to open it up for extraction. In travelling through the country it was pointed out, that by so using the dip-needle comparatively little can be proved when, as in most cases, the observations have not been taken sufficiently close together to justify definite conclusions. Also, that all such conclusions must be modified and interpreted in the light of knowledge acquired by a study of the worked deposits of the nature and habits of the same. For example, it was found that many of the worked deposits consisted of masses of magnetite in compact, dark, basic (dioritic?) rocks, and many of the dips-readings obtained where no outcrops of ore showed were along the strike of similar basic members of the series, leaving one, in the absence of anything to the contrary, to fairly conclude that these isolated dip-readings might be taken as showing the existence of separated masses of magnetite of greater or less extent, rather than of a continuous bed of ore.

"Another feature which has led to misapprehension in many cases, has been the prevalence of outcroppings of rusty rock which have quite generally been taken as indicating the existence of iron-ore below. As a matter of fact, the colour of these rusty parts seems to be almost always due to the decomposition of pyrites plentifully disseminated through the rock.

Aggregate importance.

"Whilst, however, all these points must be taken into account in judging individual deposits, the wide-spread occurrences of ore-bodies

hroughout the district as a whole, and the great likelihood of further discovery leading to a large addition to the list of deposits already known, would seem to assure its future as an ore-producer for any smelter of reasonable size that might be erected; just as in the case of the phosphate mining district of the Rivière du Lièvre in Quebec, where, whilst the deposits of that mineral show similar irregularity, the output of the district was considerable and steady for over seventeen years and ceased only because of low prices and in no way because of any failure with regard to its capabilities for yielding the mineral. Ontario—*Cont.*

"Speaking still of the magnetite deposits, their mode of occurrence may be briefly summarized as follows:—

"The chief worked deposits may be classified under three heads, viz.:—First, ore-bodies occurring at the actual contacts of belts of crystalline limestone with the harder gneissic and schistose members of the series. Second, ore-bodies where the magnetite occurs in ribs, or impregnating schistose or gneissic belts, in most of which cases limestone is either absent from the vicinity altogether or only occurs at some little distance from the ore-body. Third, ore-bodies occurring entirely in areas of basic rocks, very much after the manner of the apatite deposits of Ottawa county, Quebec, where these are found in the pyroxenites. Classes of magnetite deposits.

"In the first and second classes, there is a tendency for the ore-bodies to follow along the strike of the formation, either entirely isolated from each other or separated by intervening stretches of rocks either free from magnetite or too poor to pay for extraction. In the third case, the ore shows in detached, irregular occurrences, the rocks being, as at some points opened, reticulated by numerous veins, seams, &c., of magnetite, showing at times vuggy or drusy cavities with crystals of calcite, hornblende and other minerals. The magnetite will thus vary in its occurrence from places where there is a considerable admixture of foreign matter to those where the ore is in considerable mass and comparatively free from admixture.

"Where the ore occurs in the schistose rocks, the magnetite frequently shows as detached grains plentifully disseminated through the substance of the schist, varying in proportion between the extremes of a magnetite-bearing schist, and ore with a small intermixture of bisilicate minerals. In places, in immediate association with the ore, a chloritic schist occurs which probably results from the local alteration of the materials of the inclosing schistose rocks.

"The developments made in the district in the way of proving the deposits, have been comparatively shallow in most instances, being Mining developments.

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limited to depths under 100 feet; although, in a few cases, by pits and diamond-drill holes the ore has been proved to a depth of 300 feet. Longitudinally, the distance between the extremes of any range of pits would come well within 2000 feet for the most extensive mine in the district, whilst in most instances the known extent in length of any string of ore bodies is covered by a few hundred feet, and frequently the whole development consists of one more or less circular pit.

"As to the width of the ore-deposits, it is extremely variable, even in the more regular belt-like masses. At the same mine it is found to vary from one or two feet to thirty or forty feet; whilst, with regard to the more irregular deposits in the basic rocks, it would be impossible to actually say which dimension of the pit to take as width. At Robertsville, the large pit has surface dimensions of 40x60 feet, with a reported depth of 250 feet, and at the old Chaffey mine are three large pits, separated only by narrow walls of rock, which are said to be about fifty feet deep and would measure, in the case of the two larger, fifty feet by one hundred and fifty feet, and for the smaller about thirty feet by one hundred and fifty feet. At the Yuill mine, is a pit about one hundred by thirty feet, reported sixty feet deep, and this, with the two previous examples, will illustrate the dimensions of some of the largest of the irregular ore-bodies of the district. It is stated that the Robertsville mine shipped over 60,000 tons, which further indicates the size attained by such ore-bodies, and as it is stated that the three diamond-drill holes put down on the hanging-wall side here, went through twenty feet of ore at a depth of 550 feet, the body of ore evidently extends a considerable distance below where work was abandoned.

Character of the ores.

"The magnetite ore of this district presents the following features. The shipping ore of course represents the best as selected from the general run of the ore mined, and is in general pretty free from sulphur as far as visible pyrites is concerned. The various piles of ore also, with very few exceptions, showed no visible apatite. Beyond this no further statement can be made as to the percentage of sulphur and phosphorus which might be expected in the ores of the district taken as a whole and in large shipments, short of spending considerable time and money in really sampling large piles. That the percentage of these deleterious ingredients does not prevent the use of these ores in the blast furnace under proper conditions, is evidenced by the fact that as long as the prices permitted their exportation, the United States smelters were quite willing to buy and use them.

"The ore-bodies do carry pyrite and often in considerable quantity, but in most cases in such a way that the pyritous parts can be

rejected by hand picking. At some points visited, however, the pyrite was so finely and evenly distributed throughout the ore as to render its elimination by this simple process impossible, and this has also been found to be the case in portions of some of the larger and better known deposits which have elsewhere yielded large quantities of clean shipping ore. Ontario *Cont.*

"In some cases, nearly the whole of the material taken out has been shipping ore, as evidenced by the smallness of the waste-pile relatively to the size of the excavation, though in most instances the amount of waste has been considerable. In the case especially of some of the isolated occurrences in the basic rocks, apatite occurs associated with the ore.

"As shown by the ore-piles, the foreign matter which would have to be dealt with in smelting would be mostly of a fusible nature, consisting of hornblendic, micaceous, and chloritic material distributed through the mass, as well as in the seams in the ore. Calcite is also a common ingredient, with more rarely quartz. These minerals by proper selection should make a good slagging mixture.

"In grain, the ores at different points show varying characters. Those of the ore-bodies in the basic areas are apt to show a peculiarly vitreous fracture, vuggy structure, and interferent crystalline aggregation of the magnetite; whilst at other points the structure of the ore is schistose, platy or granular, with a coarse or finely crystalline cross-fracture.

"The ore already mined and available, is represented by the stock-piles at some fifteen places, and amounts to about 17,000 tons. It is stated that in the past the total shipments from this district have amounted to some 220,000 tons of magnetite, to which must be added about 30,000 tons from the Dalhousie and McNab hæmatite deposits. Ore in tock.

"The available analyses of these ores are those of hand specimens, which cannot be taken as representing the actual composition or character of bulk lots, such as can be shipped. The examination made of the ore-piles of the district showed a visible admixture of foreign materials, already mentioned, of from five to fifteen per cent, estimated by the eye. This would, of course, bring down the theoretical percentage of iron in magnetite (72·37 per cent) to from 60 to 65 per cent. Analyses of ores.

"A table has been prepared of the several analyses of the ores of the district, made at various times in the laboratory of the Geological Survey and published in the Reports. This it is proposed to publish in connection with a more detailed account of the mines, together with

Ontario—*Cont.*

such additional analyses as may be made of specimens recently collected Meanwhile, the following general statement, based upon the existing information, may be given :—

"Of the 31 determinations of metallic iron, 22 were of magnetites and 9 of hæmatites, the average of the former being 59·20 per cent, of the latter 59·58 per cent. Of the 15 determinations of phosphorus in the ore, the proportions in 10 magnetites varied from a trace to 0·110, whilst in one specimen small crystals of apatite were visible to the eye, although the proportion of phosphorus was not actually determined in this case. In 5 hæmatites, the phosphorus ranged from 0·010 to 0·235 per cent.

"In 9 magnetites the sulphur ranged from a trace to 1·75 per cent, while in 5 examples of hæmatite it ranged from 0·004 to 0·070 per cent.

"Titanic acid was looked for in two of the hæmatites, but not found. Of 21 magnetites examined for this substance, 11 were free from it, in four other cases it ranged from 1·03 to 5·92 per cent, whilst in the ore from the Yankee and Chaffey mines, it was found in four analyses to range between 5·70 and 16·45 per cent.

General character of ores.

"Thus it may be stated that, in so far as these analyses represent the general character of the ores, the percentage of phosphorus is low, the sulphur is in some cases rather high, while the titanium, with a few exceptions, is inconsiderable in amount. Should it be found advantageous in some cases to do so, the amount of sulphur might no doubt be reduced by roasting.

"It will be observed that the percentage of titanium is high in some cases, but where it is in large proportion, as at the Chaffey and Yankee mines, it is only what one would expect of such irregular bunches of ore in a coarse diabase rock.

"In the absence of determinations based on carefully sampled lots representing large quantities of the ore, it is not possible accurately to determine what proportions of phosphorous, sulphur or titanium would have to be dealt with in furnace charges, or to what extent it might be advantageous to mix these with other ores. The ores of the district have been used already by managers of smelters in the United States, presumably in this way, and lately also the Drummondville smelter in Quebec has purchased these ores for admixture with their own bog ores.

Improvement in steel-making methods.

"The constant improvement in methods of smelting in late years, has of course rendered it possible to utilize more impure ores than formerly, and even in making the best grades of steel a much lower grade

of pig can be used. In this connection it may be useful to quote an article by Mr. H. H. Campbell, on 'Open Hearth Work at Steelton,' in The *Mineral Industry* for 1893, p. 378.* Ontario—*Cont.*

"Speaking of the large open-hearth furnaces, with tilting hearths, in use there, with either basic or acid lining, he says:—

"'The ability to remove the slag in such a furnace renders possible the use of an impure stock [pig], and charges have been successfully handled which contained 0·28 per cent sulphur, whilst others have had 3 per cent of phosphorus. For the most common work it may suffice if the phosphorus and sulphur are both brought below 0·10 per cent; but this by no means represents the regular practice. The charges in the basic furnaces generally average from 0·25 to 0·50 per cent in phosphorus and from 0·07 to 0·12 in sulphur. This is reduced to a content of from 0·005 to 0·04 phosphorus, according to requirements, and from 0·015 to 0·06 sulphur in the steel.

"'The large steel castings are made from one of these tilting furnaces, and by careful selection acid metal of 0·015 phosphorus has been produced. The smaller castings are made from a five-ton acid furnace and contain from 0·025 to 0·04 per cent phosphorus. This pure metal gives steel which will compare with the products of any of the celebrated foreign manufactories.'

"*Hæmatite.*—A number of points were examined where deposits of hæmatite were reported to occur, with a view to ascertaining the possibilities of obtaining supplies of this class of ore. Apart, however, from the old Dalhousie or Playfair mine in Dalhousie township, nothing was seen that could be properly described as a hæmatite deposit. In some cases the only indications consisted of pieces of hæmatite, either lean or rich, ploughed up in fields; at others, an ochreous impregnation of the rocks or soil had led to the belief that the prevalence of so much rusty material must indicate the existence of solid hæmatite in depth. In every case, however, a little investigation of the surroundings would demonstrate the connection of the phenomena with the occurrence of outlying patches of the Potsdam sandstone. Where this formation showed distinctly, it would appear as if the supposed hæmatite deposits consisted of shattered portions of the sandstone, the spaces between the broken pieces being filled up with loose ochreous oxide of iron, which had also percolated in and filled the interstices between the grains of the sandstone, thus giving the whole a very rusty appearance. In places, specimens could be obtained of the Hæmatite ores.

* *The Mineral Industry* for 1893, by R. P. Rothwell, Scientific Publishing Company, New York.

Ontario—*Cont.*

solid hæmatite; but these, judging from all the appearances, probably owe their condition to a further consolidation of the original loose ochreous form of the oxide. This action, however, at the points studied, has only gone on to a limited extent, nor did it seem likely at any of these points that any large quantity of the richer and more solid material would be obtained. The bulk of the material wherever seen, consisted of sandstone impregnated or stained with ochreous oxide of iron to a greater or less extent, constituting at best a very lean ore.

Hæmatite reported in many places.

"It was found impossible, in the time at disposal, to visit all the reported occurrences of hæmatite, but in most cases, from the description given, it is evident that they are similar to those noted. In the report of the Ontario Mineral Commission, pages 128 to 142, many such places are mentioned, and at one place, viz., Tamworth, a number of shallow pits were put down which proved the superficial nature of the deposit, and that it was underlain by crystalline limestone. The quality of the ore here is stated to have varied also from rich to quite lean.

"The Geological Survey called attention years ago to similar occurrences in the Potsdam at other places, as will be seen by referring to the Geology of Canada, pages 88 and 89, and the dolomitic nature of this formation in places was also alluded to.

"Taking everything into account, it may be assumed that the phenomena observed are the result of the decomposition of ferruginous dolomitic parts of the Potsdam sandstone, with the formation of ochreous oxides of iron and further consolidation of the same in spots into the hæmatitic form, the lean ores consisting of adjacent portions of the sandstone impregnated with the ochreous decomposition product.

"In a few cases, the ore was found apparently passing down into the underlying Archæan rocks, but evidently to a limited depth only and in such a way as to lead to the belief that, these cases resulted from percolation downwards from the overlying rocks into joint-planes and cavities.

Character of the Dalhousie deposit.

"Of those visited, the Dalhousie mine is the only one having any features of a continuous ore-body, for there the ore was followed down into the crystalline limestone to a depth of 100 feet. Ore was taken out for a length of about 500 feet, with an average width of perhaps 10 feet, although it is stated that the ore-body was very irregular, often thinning down very suddenly to two feet or less. The details of this deposit are well shown in the plan of the mine accompanying Mr.

Vennor's description in the Report of Progress of the Geological Survey for 1872-73, pp. 176-77.* Ontario—*Cont.*

"When visited this summer, it was found that the limestone walls had caved in so as to fill the excavation nearly to the top with débris. The ground being free from cover, however, the surface characteristics of the ore-body can be clearly made out. The surrounding area shows frequent outcroppings of rock, which is seen to be crystalline limestone all round. A close examination for some distance in both directions on the run of the ore-body, showed that it did not extend much beyond the present workings, as far as outcropping at the surface is concerned. The extension of the strike of the ore-body westward, would be along the northern bank of the Mississippi River, and for a distance of about a quarter of a mile, considerable trenching and stripping has been done with a view to tracing its continuity, but without success. In most cases no signs of ore seem to have been found, although at two places some ore was obtained, varying in quality from lean ochreous sandstone to rich and solid lumps of hæmatite. From the appearance of the material and the features presented, these would seem to be simply ferruginous outlying patches of the base of the Potsdam, resting as already described, upon the denuded surface of the Archæan rocks.

"The interesting point about the Playfair mine proper, lies in its being a body of ore extending downward for a known depth of 100 feet into the crystalline limestone. It is suggested, however, that it simply represents ferruginous material leached out from the originally-overlying Potsdam sandstones, deposited in a waterworn cavern in the underlying limestone. This view is borne out by several features observed on the spot, and is shown in the plan and sections of the mine already alluded to, viz., the irregular shape of the ore-body; the fact of its continuing eastward underground without outcropping, being in fact entirely over-arched by limestone; the smooth bounding surface between the ore and the limestone; the tendency of the body to show a general lens-shape and to thin out gradually in depth. This thinning out in depth is also mentioned as a feature of the Arnprior deposit in McNab township which occurs similarly in crystalline limestone.† Hæmatite filling cavities in limestone.

"The yield of the Dalhousie mine from the commencement of work to 1873 was about 15,000 tons of ore.

*In reproducing this illustration in the report of the Ontario Mineral Commission, p. 139, figures 21 and 22, the scale as there reduced, has been erroneously given as 600 feet to the inch instead of 200 feet, as it should be, which makes the length of vein developed appear longer than it really is.

†Report of Progress, Geol. Surv. Can., 1873-74, p. 212.

Ontario—*Cont.*

"From the published description of the McNab mine already alluded to, it would seem to be very similar to the Dalhousie mine.

McNab mine.

It is said to have been worked to a depth of about 80 feet, when, according to one account it thinned out and according to another it was cut off by a fault.

Bog ores.

"*Bog Ores.*—No deposits of bog-iron ores were visited, but the existence of these ores is reported at a number of places in the district.

Means of transport.

"*Communications, etc.*—In studying the subject of the available supply of ore for a possible smelter at Kingston, it becomes a question as to what district may be fairly taken as tributary to that centre. With its lake communications ores might undoubtedly be brought from afar, but the scope of this inquiry was understood to be confined to the possibilities of the immediately surrounding district. With the present railway and canal communications, this would probably include the counties of Frontenac, Lanark and Leeds with adjacent portions of Carleton and Renfrew counties. The Kingston and Pembroke railway would be the main feeder, connecting as it does with most of the chief mines, but other deposits would be reached by means of its connections with the Canadian Pacific railway at Sharbot Lake and Pembroke and with the Ottawa and Parry Sound railway, as well as by the Ottawa and Kingston canal. In fact, the means of communication of the district are very good to the north and east, and, were it necessary, ore could undoubtedly be also drawn from the deposits in Hastings, Peterborough and Haliburton counties to the west.

"The question of the local facilities for and of the cost of smelting, as well as the question of the marketing of the product, need not be here dealt with, as it is understood that those interested have thoroughly satisfied themselves on these points.

Summary of conditions.

"*Summary.*—Reviewing the results obtained by the investigation and having in view the answering of the questions propounded, the conclusions arrived as may be stated as follows:—

"There seems no reason to doubt the possibilities of the district in the matter of supplying ore for a smelter of the size contemplated (viz. 100 tons per day), providing exploratory and development work is kept well ahead of the actual work of extraction of the ore, for although the ore-deposits are irregular in their nature, yet the occurrences already known are numerous, and doubtless many others would be located by explorers were a demand to arise for the ore.

"Apart, however, from the general chances, as above set forth, and the 16,000 to 17,000 tons in the stock-piles of the district, the question of ore immediately available must remain in abeyance, as naturally no

measurement of 'ore in sight' could be made with all the mines abandoned and full of water. The ore supply would be almost entirely magnetite, with possibly some hæmatite or bog ore. In the magnetite, careful selection would probably be necessary, in the case of some of the deposits, to keep the proportion of sulphur and phosphorus low." Ontario—*Cont.*

The first part of the year, before the commencement of field operations, was occupied by Mr. A. E. Barlow in plotting the surveys of the previous season and procuring such topographical details as were deemed necessary for the completion of the Nipissing sheet (No. 131, of the Ontario series). Much time was likewise consumed in studying the geological results obtained, while considerable progress was made in writing an accompanying report. In connection with Mr. Ferrier, various petrographical studies were undertaken, which proved of material assistance in the more accurate delineation of the various rock formations exposed in the region under examination. The permanent labelling of the large suite of rock specimens obtained, also occupied some time. The map of the area above named has been completed and is now in the hands of the engravers. Work by Mr. Barlow.

As it was considered advisable to continue the work of previous years on the Temiscaming sheet (No. 138 of the Ontario series), Mr. Barlow was instructed to secure such additional topographical and geological information as seemed essential for a map and report of an approximately final character, covering this district. This sheet adjoins the Nipissing sheet to the north, while its south-western corner abuts on the north-east corner of the Sudbury sheet, already published. The map will include nearly the whole of Lakes Temiscaming and des Quinzes, with the northern portions of Lakes Keepawa and Temagami. All information necessary for this sheet has been collected, and it is hoped to finish the compilation of both map and report during the present winter. In regard to the summer's exploration, Mr. Barlow reports as follows :—

"I left Ottawa for the field on the 31st of May last, and was joined in Mattawa by Mr. A. A. Cole, B.A. Sc., of Montreal, who had been appointed as my assistant for the whole of the season's work. Mr. Cole's previous experience in the field-work of the survey, when acting as assistant to be Mr. A. P. Low and Dr. Adams, better fitted him for the work he was called upon to perform, while his zeal did much to advance the objects of the exploration. Surveys on the Temiscaming sheet.

"By the kindness of Mr. Colin Rankin, of the Hudson's Bay Company, Fort Temiscaming, an abandoned post belonging to this com-

Ontario—*Cont.*

pany, was again made our headquarters for the season. The month of June was taken up in detailed micrometer surveys and geological examinations of Whitefish, Turner, Nonwakamnig, Wakaimika and Muskananing (Lady Evelyn) lakes, in the north-western corner of the sheet, connection being thus made between my survey of Temagami Lake, of 1887, and the Montreal River, which had been surveyed with chain and transit in 1868 by Mr. A. Forrest, P.L.S., of the Crown Lands Department of Ontario. A survey was likewise performed of the route via Mud and Sharp lakes to Lake Temiscaming at Haileybury, as well as of a number of smaller lakes in this neighbourhood. During July, similar measurements, accompanied by a geological examination, were made from Aminipissing Lake via Breeches and Mountain lakes to White-bear Lake, including Thieving Bear and Net lakes. These surveys were continued, and included a chain of lakes which fall into Net Lake, the largest of which is known to the Indians as Waibikaiginaising (rib lake), and which extend to within a short distance of Bay Lake (on the Montreal River). The latter part of July and the first week of August were spent in examinations and surveys of Obascong, Friday and other smaller lakes which empty into the north-eastern bay of White-bear Lake, and of Bear Lake, a narrow sheet of water six miles in length, which flows into the Matabitchouan River below Rabbit Chute. The remainder of August was employed in a geological investigation of the shores and islands of Obabica and Wawiagama lakes, situated to the west of Lake Temagami, and while thus engaged, Mr. Cole was busy making surveys of some lakes to the west of Rabbit Lake.

"This examination being completed, a trip was made through Temagami, Nonwakaming and Lady Evelyn lakes, and the Montreal River was followed as far as Round Lake, the shores and country in the immediate vicinity of this river being closely examined to its mouth, on Lake Temiscaming. During July, Mr. Cole made a survey of all the roads in the townships of Duhamel, Guigues and Laverlochère, on the east or Quebec side of Lake Temiscaming.

Boundaries of Huronian rocks.

"The boundaries between the conglomerates, slates and quartzites, which here constitute the Huronian system, were traced out, as well as the more important line of junction between these Huronian strata and the various granites and gneisses. Great care was taken in the delimitation of the diabases, gabbros and other basic eruptives, which rocks had been found to contain the nickeliferous pyrrhotite and chalcopyrite in the Sudbury district, to the south-west.

Ore deposits.

Extensive deposits of these sulphides were noticed in 1887 and 1888 on the east side of Temagami Island and on the south-east shore of Ver-

milion Lake to the north of the north-east arm of Temagami Lake. The deposits of argentiferous galena at the Mattawapika (outlet of Lady Evelyn Lake) and at Wright's Mine, Lake Temiscaming, have already been noticed in previous reports. In view of the intention to publish the report covering these explorations at an early date, it is unnecessary to go into further details regarding the geological features." Ontario—*Cont.*

The work in connection with the above sheet was completed on August 27th, when Mr. Barlow returned to Ottawa to obtain certain maps and other information necessary for the continuation of the geological and topographical survey of the Haliburton sheet (No. 118 Ontario series). Work in this region was commenced by Dr. F. D. Adams, in 1892, by the examination of certain mineral deposits which had attracted considerable attention, and which were situated in the townships of Digby, Dalton, Lutterworth, Somerville and Galway. Work on Haliburton sheet.

A preliminary report in connection with these examinations, accompanied by a brief summary of therock formations encountered in a general geological reconnaissance of most of the areacovered by this sheet, has already appeared.* The position of sheet 118 is there described as "situated to the north of Lake Ontario and south of the River Ottawa, in the countiesof Victoria, Peterborough and Hastings. In order to describe its position more accurately, it may be stated that the four corners of the sheet lie in the townships of Digby, Finlayson, Hagarty and Grimsthorpe." The work commenced in 1892 was continued by Dr. Adams for only a few weeks in 1893, when, owing to lack of funds, further work in this district was postponed. Two weeks only in the first part of September were occupied by Mr. Barlow in work properly belonging to this sheet. Owing to the difficulty in fixing the exact latitude and longitude of the map, it was thought expedient to run a tie-line from Gelert, on the Victoria division of the Grand Trunk railway, in the south-western part of the sheet, to Waubaushene, on Georgian Bay, the position of which has been accurately determined by the Hydrographical Survey. This tie-line was run with great care by Mr. James White, chief draughtsman of this department, and it is believed will suffice for the purpose for which it was intended. It is hoped that the work thus begun will be resumed early next year, as it is sure to prove of great interest.

Mr. Barlow returned to Ottawa on October 1st.

*Annual Report, Geol. Surv. Can., vol. VI. (N. S.), part J.

Ontario—*Cont.*

Work by Dr. Ells.

From the beginning of the year 1895, until exploratory work was resumed in the field in the early summer, Dr. R. W. Ells was occupied with the preparation of map-sheets Nos. 121 and 122, extending along the Ottawa Valley from Rigaud Mountain to the Petewawa, and in compiling the notes of surveys by himself and other observers for an explanatory report upon these sheets. His field-work of the year was principally directed to the completion of the same sheets, but it was considered advisable that some part of the time should be given to the completion and revision of data for the geological mapping of the south-west sheet of the "Eastern Townships" map, shortly to be be published. Dr. Ells makes the following preliminary report of the results of his examinations, which extended from May 25th to September 23rd :—

"The field-work of 1895, was principally devoted to the mapping of the Laurentian and overlying formations found on both sides of the Ottawa in the counties of Renfrew and Pontiac. In September, a revision of the area east of the St. Lawrence, including the Phillipsburg and Stanbridge districts, was made. A careful examination of the islands of Montreal and Jesus and of the country along the Lower Ottawa, was also undertaken, in order to ascertain, if possible, the thickness of the several Palæozoic formations in this vicinity, from the Calciferous upward, which might serve as a guide to any subsequent boring operations in the Ottawa and St. Lawrence river valleys.

Examinations in Renfrew and Pontiac.

"Specimens illustrating the many varieties of the crytalline rocks of the Laurentian were collected, not only of the stratified gneiss and limestones, but also of the several kinds of intrusions which are found throughout the entire Laurentian area. Collections were also made of the crystalline dolomites and schists of the Hastings series, for the purpose of study ; the exact position of this division of crystalline rocks not having yet been definitely settled.

"The occurrence of Palæozoic rocks, ranging from the Potsdam sandstone to the top of the Utica formation, was noted at a number of points throughout the area. Their distribution was mapped as carefully as the heavy mantle of drift would permit. In some places, these newer formations were found to be extensive, while in others they are represented by but small patches resting in depressions of the older crystalline rocks.

Past-Archæan granitic intrusions.

"The Laurentian gneiss and limestone, were found to be penetrated at many points by masses of granite, generally reddish, with syenites, diorites and occasionally trappean rocks. Much of the granite is

of the binary variety, composed chiefly of white felspar and quartz, similar to that found so frequently in the Grenville series. That some of the intrusions are comparatively recent, is evident from their action not only on the Laurentian limestones and associated gneiss, which they have penetrated and altered at many points, but also from their relations to the beds of the Calciferous, which at several points have also been broken up by dioritic dykes, apparently projections from the great crystalline series. This peculiarity of some of these intrusives was also noted last year in Nepean township, near Ottawa, where the granites penetrate the Potsdam sandstone. Ontario—*Cont.*

"The Potsdam sandstone was not seen west of the township of Fitzroy, the Calciferous, westward of this, being the oldest of the Palæozoic formations observed. On Allumette Island, the limestone of this formation is well exposed, on the western end, but is overlain eastward by the sandstones and shales of the Chazy which pass upward through the calcareous part of that formation into the highly fossiliferous beds of the Black River limestone at Paquette's Rapid, near the lower end of the island. Cambro-Silurian areas.

"Inland, to the south, the Chazy and lower part of the Trenton formation have a considerable development in the valley of the Bonnechere, at Eganville, whence they extend eastward to Douglas village. The flat-lying limestones occur for some distance on both sides of that river. Another outlier extends from the east side of Lake Dove eastward to Mink Lake, and thence spreads over the flat area between Douglas and Cobden ; while yet another considerable area occurs on the lower west half of Muskrat Lake, which is discharged by the Muskrat River at Pembroke. Along this stream the Chazy beds also show, capped in Stafford township by highly fossiliferous strata of Black River age. A small outcrop of Chazy is again seen in a cutting on the Ottawa and Parry Sound railway, about three miles west of Killaloo station, while on Clear Lake, to the south, the Trenton and Utica beds are exposed at the south-west corner. From these a collection of the characteristic fossils of the Utica formation was made by Mr. W. J. Wilson.

"The western limit of our surveys on the south side of the Ottawa, extended from the vicinity of Golden Lake and the township of Brudenell, northward to a point about seven miles west of the mouth of the Petawawa. The southern limit of the sheet extends from near Arnprior westward past Renfrew and Clear Lake in Sebastopol, though our surveys during the past season extended for some distance further south, in order to connect with previous surveys on the Madawaska by Mr. James White.

Ontario—*Cont.*

Surveys north of Ottawa River.

"On the north side of the Ottawa, the work extended westward to the sharp bend at the foot of the Deep River in the township of Sheen, which marks the most westerly of the settlements on the Quebec side. Traverses were made of all roads in the townships of Sheen, Chichester and along the Black and Coulonge rivers for nearly twenty miles, the country being exceedingly hilly and rough. The crystalline limestones and associated rusty quartzitic gneiss, were found to have a considerable development along the Black River, a broad band of the limestone extending for a long way up the valley of the stream with a general strike of a few degrees west of north. The most westerly observed outcrop of the crystalline limestone and of rusty gneiss on the north side of the Ottawa, was about two miles west of the bridge on the post-road over the Black River, the rocks to the west of this being mostly gneiss and intrusive granite, with syenite and diorite.

Crystalline limestones.

"The relations of the cystalline limestone and its associated quartzose, rusty and often garnetiferous gneiss, to the great masses of the lower reddish gneiss or foliated granitic rock are clear, and confirm the conclusions stated in earlier reports, that the oldest known rock of the Archæan is a foliated granite-gneiss, upon which the more regularly stratified gneisses rest. Whether there is here a direct conformity between these two series, or whether they are distinct and unconformable, cannot be definitely ascertained till all the surveys of the areas in question are plotted and mapped. When this is done, and the masses of clearly intrusive newer granite and syenite have also been separated, it is hoped some conclusive data as to structure will be obtained which will facilitate future work among these crystalline rocks.

Limestone conglomerates.

"It is interesting to note the occurrence of unmistakable limestone conglomerates in the Laurentian crystalline rocks of the Grenville series in Renfrew county. These were seen at several widely separated points, as in the township of Westmeath, along the Rocher Fendu channel of the Ottawa, in the townships of Bromley and Stafford, in Sebastopol, and along the Opeongo road. In these conglomerates, which rest upon the rusty gneiss are pebbles of garnetiferous, hornblendic and reddish gneiss, quartzite and rusty gneiss, well rounded and water-worn. The grayish quartzose gneiss, in the lower part of the calcareous series, presents all the aspects of an altered quartzose sandstone, and the whole series at these places looks like a succession of altered sediments.

Hastings series.

"The Hastings series, as seen about Calabogie Lake and on the line of the Kingston and Pembroke railway, as well as generally throughout the townships of Horton, Bagot and MacNab, consists of a very

considerable development of hornblende-schist and diorite, dolomitic limestone and mica-schist, portions of which are garnetiferous. They are cut by masses of granite and syenite, generally reddish in colour. Around Calabogie Lake and at other places, the hornblende-schist overlies directly the rusty gneiss and limestone of the Laurentian or Grenville series. So far as I have yet ascertained, there does not appear to be any decided break between the rusty gneiss and limestone, and the hornblende-schist and dolomite series, but further work in this direction is necessary to settle the relations of these rocks. Ontario—*Cont.*

"Some of the reddish syenite and granite rocks associated with the last, and exposed along the line of the Kingston and Pembroke railway between Renfrew and Calabogie, would furnish beautiful building stones. They would take a fine polish, and can probably be obtained in large blocks. Economic minerals

"Other minerals of economic value were not observed in workable quantity at any point throughout the area included in the season's work, with the exception of the iron deposits near Calabogie Lake. West of Douglas, dykes of pyroxene occur, which carry small quantities of pyrites and mica, with irregular quartz-veins of small size. Shell marl is found in several lakes in considerable quantity and should be of economic importance. Perhaps the most extensive of these deposits is in Mink Lake, Wilberforce township, Renfrew Co. Other lakes holding marl were found in Westmeath, and Ross, in Ontario, and in Masham and Upper Wakefield, west of the Gatineau River.

"Very considerable areas of crystalline limestone occur throughout the counties of Renfrew and Pontiac, some of which constitute useful marbles. Of these, the quarries near Portage du Fort were referred to in last year's summary. At Renfrew, extensive quarries exist which furnish an excellent quality of stone, both for building and for burning, very similar to the stone from the Arnprior quarries. A new deposit of snow-white marble has been opened up on lot 19, concession 6, Ross, on the property of Mr. Chas. Bilson. This is a beautiful stone, highly crystalline, and yields large blocks for monumental or decorative work.

"A deposit of graphite has recently been exploited to some extent near the Madawaska, in the township of Brougham. The pieces already obtained show the vein to be of considerable size, but the locality was not visited by me.

"Observations on the glacial geology were made throughout the area. The direction of the striæ was taken at many points on both sides of the Ottawa River, and the course was found to vary from S. 60° Glacial geology.

Ontario—*Cont.*

E. or S. 70° E. on the north side, to S. 40° W. in the south-west part of Renfrew county, south of the Ottawa. Along the Ottawa itself, the direction of these ice-markings generally follows the course of the stream, and the movements of the ice seem to have been affected by the local conditions of the surface.

"Kames and deposits of morainic matter occur frequently, with old shore-lines of well-rounded stones. A prominent feature of the surface geology over much of the area, is the distribution of sand and clay. These deposits have a wide extent, and while marine shells are but rarely found, the character of the clays is undoubtedly marine, the presence of organisms at a few widely scattered points, clearly establishing their mode of deposition. They are overlain by extensive sand deposits, especially in the area to the west and south of Pembroke, and in places these are clearly interstratified with the clay. Deposits of Saxicava sand also occur, containing abundance of marine forms.

"During the last part of June and the first half of July, Mr. W. J. Wilson accompanied me and obtained important facts pertaining to the glacial geology of Renfrew county."

QUEBEC.

(With adjacent parts of Ontario.)

Work by Mr. Giroux.

In the office, since the date of the last Summary Report, Mr. N. J. Giroux was employed principally upon the completion of the north-west sheet of the "Eastern Townships" map.

During the summer, Mr. Giroux has been occupied with field-work, chiefly in the area of sheet No. 120 of the Ontario series of geological maps. This comprises the counties of Grenville, Dundas, Stormont, Glengarry and portions of the counties of Carleton, Russell and Prescott, in the province of Ontario, as well as the counties of Huntingdon, Soulanges and part of Vaudreuil, in the province of Quebec.

The general geological structure of this region had been ascertained very early in the history of the Geological Survey, but questions connected with economic problems such as water supply, building materials, &c., now render it desirable that a more detailed and accurate map should be prepared.

Wells bored at Alexandria.

Mr. Giroux was in the first instance instructed to visit the town of Alexandria, for the purpose of ascertaining, as far as possible, the geological conditions there, in connection with a well then being sunk

for water. The well was found to be on the northern bank of the Garry River, a branch of River Delisle, where ledges of grayish fossiliferous Trenton limestone occur, holding crystals of clear white calcite and small partings of black, shiny, very friable shale. These beds lie apparently flat, and extend but a short distance along the stream on which they outcrop. From the information obtained on the spot by Mr. Giroux, combined with that resulting from a careful examination of the samples of drillings received from the well by Dr. H. M. Ami, the subjoined section is drawn up. Quebec—*Cont.*

Depth.	Character of rock.	Formation represented, and thickness.
Feet.		
0	Dark gray impure limestone, holding fossils, among which can be recognized the following: *Rafinesquina alternata*, Emmons; also fragments of what appear to be *Plectambonites sericea*, Sowerby; *Strophomena* cf. *S. incurvata*, Shep.; *Zygospira*, sp.; *Escharopora*, sp.; and *Helopora* or	
470	*Arthroclema*	*Trenton*, 470 feet or more.
570	Dark gray impure limestone, softer than preceding. No fossils detected	*Black River*, 100 feet (assumed thickness).
755	Dark gray impure limestone, underlain by greenish-gray calcareo-arenaceous shales—at times fine-grained, at others coarse and more highly arenaceous. Obscure fossil remains detected in the upper calcareous beds	*Chazy*, 185 feet.
786	Hard, compact, dark, chocolate-coloured limestone, probably magnesian; no fossil remains observed	*Calciferous*, 31 ft. or more.

At 730 feet, in the Chazy, a porous bed about one foot thick was met with, yielding strongly saline and bitter water. More water of the same character was found in the last twenty-five feet, and the undertaking was abandoned at 790 feet.

A specimen of the saline water from the Chazy formation, above noted, was subjected to a qualitative examination in the laboratory of the Survey, and was found to contain a very large quantity of chlorides (sodium and calcium); a rather small quantity of sulphates (magnesia); and a somewhat large quantity of carbonates (lime).

Mr. Giroux writes: "There was altogether but very little water got in this boring, the water standing at about fifteen feet from the surface when the drill was in the hole, and when taken out of it the water would drop down to 100 feet below the surface. Another test was made, not very far from the station, to a depth of about 350 feet, with as little success as on Garry River." Saline water.

Quebec—*Cont.*
Surveys on area of sheet 120.

Of his general field-work for the season, Mr. Giroux gives the following account:—"On the 6th of June I began to survey roads in order to locate as accurately as possible all the rock-exposures, since in a district like this, imperfectly mapped, and so extensively covered with drift, the new roads, and those not much used, generally afforded more exposures than the main roads.

"In order to obtain a general idea of the geological structure, a few sections were made north and south from the River St. Lawrence to the Ottawa River, as well as several east and west, across part of the area to be examined. Starting from Glen Robertson, the road northwardly was surveyed as far as L'Orignal, thence back to St. Isidore de Prescott in a south-westerly direction, and down to Maxville and across Glengarry county to the River St. Lawrence. A very few exposures of Calciferous and Chazy rocks were, however, alone met with. I then surveyed the St. Lawrence shore-road from River Beaudette to Morrisburg, but without finding a single rock-exposure. From this last mentioned village I went as far as Embrun, crossing the township of Dundas and part of Carleton in a south-westerly direction, and from Embrun I travelled eastwardly to Glen Robertson and back to River Beaudette, having seen rocks of the Chazy, Trenton and Utica in this last circuit.

"By making these sections, a district was outlined including part of Soulanges county, almost all Glengarry, all Stormont, half of Dundas, and parts of Carleton, Russell and Prescott counties, forming an area of about 675 square miles, in which roads were surveyed until the 25th of June. Five days were then spent in ascending River Beaudette, in a canoe, as far as Glen Nevis, a distance of about fourteen miles, then descending the River Delisle, and going thence to St. Polycarpe, without seeing any rocks *in situ*. The low state of the water in these streams, compelled us to drag the canoe over sand, gravel and mud banks about half the distance.

Surveys south-east of Lake St. Peter.

"Early in August, the water being then very low in all the streams, an examination was made of the south-east part of the north-west sheet of the 'Eastern Townships' map, as included in your instructions. Leaving Valleyfield on August the 5th, I drove down to St. François du Lac in order to examine the small area attributed to the Medina, to the north-east of St. Francis River, south of Lake St. Peter. All the roads in this district were traversed, but no rocks were found *in situ*, even in the small brooks which ran in rather deep, irregular, clayey ravines. A number of wells have been dug in and about the village of St. Elphège, which is situated in the gore of Upton, and although

these are ten to fifteen feet deep, no solid rock was met with in any of them. Quebec—*Cont.*

"The larger Medina area to the east of the last, extends from the south-west branch of Nicolet River to the north-east, haing a width of about three miles on the north-east branch of the Nicolet River, with a maximum width of seven miles, and running about four miles north-east of the Becancour River. The red shales and sandstone forming this area can be seen in many places, and where not visible, the soil has a marked reddish-brown colour, and is, therefore, very different to the soil derived from the Hudson River rocks, which is gray. A paced survey of part of the north-east branch of the Nicolet River was made, in order to locate on that stream, an anticline in the Hudson River formation. These Hudson River rocks are much twisted, altered and faulted on both sides of the above anticlinel and more particularly to the south of it. The disturbance has very probably been caused at the same time as the fault between the Hudson River and the Sillery, which Dr. Ells observed on the Becancour River in 1388. Silurian rocks.

"Rev. Mr. Proulx, director of the Nicolet college, is sinking a well just behind that institution in search of gas, the find made in Beausé-jour some years ago at about seven or eight miles from Nicolet village, being the only indication which prompted the above named gentleman to make this trial. No gas has yet been found, although the hole was 1100 feet deep when I was there last, and the record kept gives, in descending order :—120 feet of clay, 10 feet of sand, 970 feet of Hudson River shales, with possibly Utica shales at the base. Boring at Nicolet.

"On the 17th of August I returned to Vaudreuil, and from that date to the 21st of October, with the exception of a few days spent with Dr. Ells near Montreal and St. Johns, P. Q., continued work in the area of sheet No. 120, chiefly in the eastern half of that sheet. Return to sheet 120.

"The vicinity of Rigaud Mountain was examined, and the Potsdam sandstones of Como and Hudson, which crop out at about one mile southward of Ste. Anne de Prescott and can be traced for a considerable distance in the direction of St. Redemption village. A hill of this rock to the north-west of Ste. Marthe, extends towards Ste. Justine de Newton in the county of Soulanges. The formation also appears on the shore of the St. Lawrence about nine miles east of Côteau du Lac church and extends thence to the Cascades at the lower entrance to the Soulanges canal. In the eastern and southern part of Huntingdon county, the Potsdam was in part outlined. Potsdam sandstone.

"East of the Potsdam appears the Calciferous, first at the mouth of River Delisle, on the St. Lawrence River, where a quarry has been Calciferous.

Quebec—*Cont.*

opened to furnish material for the construction of the Soulanges canal. It also occurs a short distance east of the Canada Atlantic railway, in the canal excavation, as well as at the Canada Atlantic railway bridge, where ledges of limestone were struck at 30 feet below the actual surface. Rocks of this age appear at Glen Nevis on River Beaudette, in Glengarry county, as well as at Glen Sandfield, in the same county. North of Winchester and at a short distance from Ormond are ledges of brownish-weathering, fine, gray limestone with a greenish hue which very probably belong to the Calciferous formation. To the south of the St. Lawrence, impure limestone of Calciferous age outcrops in a few places in the county of Huntingdon.

Chazy.

"The bluish-black, brittle Chazy limestone, has been, and is still quarried, in several places in the district examined, but apart from these openings but few exposures belonging to this formation could be seen. The characteristic green Chazy shales of the vicinity of Ottawa, have not been met with *in situ*, and débris of the same were seen in one place only. Near Glen Robertson station, there are two quarries in very dark, bluish-gray or blackish Chazy limestone. It is very brittle and hard, contains iron-pyrites in places and holds many brillant specks consisting of small crystals of calcite. At about one mile and a half from Glen Robertson station, there is another quarry in dark bluish-gray or blackish limestone of the same age, thick-bedded, and somewhat more concretionary than that at the above station. This limestone is not as good for building purposes as that of the quarries nearer Glen Robertson station; it has in many places a rough, pitted weathered surface and holds fossils amongst which are fine sections of *Pleurotomaria*. At about four miles and a half north of Cornwall station, there is also a small quarry in blackish, brittle, heavy-bedded and jointed limestone; it has a rough weathering which exhibits in many places a coarse net-work, the meshes being of brownish colour. It holds small inclusions of calcite as well as iron-pyrites finely distributed in thin bands.

Trenton.

"Though my surveys are not yet all plotted, I can safely say that the Trenton formation has a greater extent than any of the others in the eastern part of sheet 120. Limestones belonging to this formation have been seen in many places, among which the following may be particularly noted:—At about one mile and a half south of Vankleek Hill, there is a small quarry in fine, gray, very brittle and bituminous Trenton limestone, with partings filled with bituminous matter and joints coated with white crystallized calcite. The beds here are somewhat folded. At one mile south-east of St. Isidore, in Prescott County, hard, gray limestone contains many crinoid stems and other

well preserved fossils. On the Nation River at Casselman, limestone occurs, very probably of Trenton age. Not very far from Apple Hill station, on the Canadian Pacific railway, in Glengarry county, are ledges of gray fossiliferous Trenton limestone, and a little over one mile to the north-west of these ledges, is a quarry in bluish-gray Trenton limestone, in beds varying from one to three feet in thickness. This limestone is very fine and compact in some bands and fossiliferous in others; it is much jointed, one set of joints being perpendicular to the other. The beds are concretionary in places and separated by thin shaly partings. At about three-quarters of a mile north-east of Lochiel post-office, in Glengarry county, are ledges of gray fossiliferous Trenton limestone containing corals. At Crysler, in the northern part of Stormont county, the beds and banks of the Nation River, for about 350 to 400 feet below the bridge, and up to the dam, about one-quarter of a mile from the bridge, consist of gray, thin-bedded Trenton limestone. The limestones of this formation dip at low angles in various directions, and the non-continuity of exposures renders it almost impossible to determine their thickness. Quebec—*Cont.*

"A small basin of Utica rocks occurs about Maxville on the Canada Atlantic railway; débris of black shales belonging to this formation having been seen in half a dozen places in the neighbourhood of this village. On Mr. M. J. Fisher's property, lot 2, range 6, of the township of Roxborough in Stormont county, these black shales holding *Trilobites, Orthoceras, Lingula,* &c., form the bed of a small brook for some distance, not far from, and to the south of, the Canada Atlantic railway. These shales appear to lie horizontally. I am told that the same shales were met with in many places about Maxville in digging wells, at depths of 20 to 23 feet. Whether this small area is the continuation of the one to the east of the city of Ottawa, has not yet been ascertained. Utica.

"As a rule, the rocks in this district show glacial striæ comparatively seldom, and these vary considerably in direction from place to place. Courses were in fact observed ranging between S. 41° E. and S. 40° W. Marine shells such as *Macoma fragilis, Macoma calcarea, Saxicava rugrosa,* &c., have been found in many places in the counties of Soulanges, Glengarry and Stormont, and near Côteau du Lac church, in the excavation of the Soulanges canal, at twenty-two feet below surface, was found a fossil skeleton of the white whale or white porpoise *(Delphinapterus catodon)* but unfortunately only one of the vertebræ could be preserved, as all the rest of the bones fell to pieces. Glacial deposits.

Quebec—*Cont.*

"Fine boulders of labradorite were seen in a couple of places in the county of Glengarry. On the road from Alexandria to Glen Robertson, one of these boulders was blasted, and exhibits large crystals of beautiful iridescent labradorite.

Bog-iron.

"Bog-iron ore, is found in small quantity in the sand-hills of Vaudreuil county, and the same mineral occurs on lot 2, range 6, of Roxborough township, in Stormont county, on a small hill, a short distance to the south of the exposure of black Utica shale.

"In regard to water supply, the following notes may be given:—

Water supply.

"On River Beaudette, at about three-quarters of a mile north of the Grand Trunk railway, is a fine spring of good water. An analysis of this water has been published.* Near the hotel in Maxville, there are two wells very close to one another; the water from one of them is very good, while the other is highly sulphurous.

"Some years ago, a well was sunk in search of oil at a short distance from Bainsville, in Glengarry county. The depth is given at 760 feet, but no oil was found. Excellent water, however, flows continually from this well, to about three feet above the surface, the flow being much greater in the spring than during the summer. In the village of Maxville there is another flowing well, twenty-two feet deep only, which furnishes good water in small quantity. At about one mile east of River Beaudette, to the north of the main road to Côteau Landing, is another flowing well which is about seventy feet deep and gives excellent water. One mile further east, along the St. Thomas concession-road running northward, and between the St. Lawrence shore-road and the Grand Trunk railway, are two more very good flowing wells fifty-five to sixty feet deep only.

Peat.

"There are several peat bogs in this district, which, I think, could be worked profitably. That to the south of the St. Lawrence, in the county of Huntingdon, crossed by the road from Port Lewis to Huntingdon village, has been already worked some years ago and presents many advantages for exploitation.

"Good building material as well as numerous and thick deposits of clays very suitable for brick making are of frequent occurrence.

"During the season I surveyed 1249 miles of roads and rivers, viz., 1242 miles of roads by wheel and seven miles of rivers by pacing."

Work by Dr. Bell.

During the winter months, Dr. R. Bell was engaged in elaborating the results of his field-work on sheets No. 129 and 128, and preparing

*Annual Report, Geol. Surv. Can., vol. I. (N.S.), p. 12 M.

local geological maps to be used in laying down the details of the geology of the region from the Sudbury sheet to the eastern shore of Lake Superior, for publication on a scale of four miles to one inch, as soon as these two sheets shall have been compiled upon a proper projection. Some further progress was also made towards the completion of the Manitoulin sheet, No. 126. Quebec—*Cont.*

In 1887, as recorded in the Summary Report for that year, Dr. Bell was engaged in the geological exploration of the Upper Ottawa River, and in the course of this work, the late Mr. A. S. Cochrane (one of Dr. Bell's assistants at that time) under his directions crossed the watershed to the north of Grand Lake and followed a chain of lakes and river leading northward to Shabogamog Lake. This lake, which proved to be about thirty miles in length, was also surveyed, and the river discharging from it was followed for a further distance of some ten miles, making in all about seventy miles in a straight line from Grand Lake. The existence of an important belt of Huronian rocks was ascertained by Mr. Cochrane, but its limits, as well as the further course of the river, which at this time was supposed to flow into Hannah Bay, remained indeterminate. The river flowing from Shabagamog Lake, evidently, however, offered a route of some kind which has hitherto remained practically unknown, geographically and geologically, from the head-waters of the Ottawa to James Bay. Dr. Bell, having been requested to make a preliminary examination of the country in question, decided to follow the route indicated. He successfully descended and surveyed the whole length of the river, which proved to be the main branch of the Nottaway or Noddawai, discharging in Rupert Bay. Dr. Bell gives the following account of this interesting exploration :— Previous survey in Upper Ottawa region.

"My party consisted of my assistant, Mr. Alexander Barclay, five Indians from the Maniwaki Reserve, and Théophile Michaud, a French Canadian voyageur, who had accompnied me during six previous years. I provided myself with two birch-bark canoes, in which we carried our provisions, outfit and everything necessary while making our measurements during the season. By this means, we proceeded very rapidly, otherwise it would have been impossible to make such an extensive topographical survey, together with various explorations, in so short a time. Party and route.

"In going northward by canoe from Maniwaki, two routes are available, one by the Gatineau River and its tributary the Gens de Terre, and the other by the Désert and its branch the Thomasine. Both are very difficult for loaded canoes. We left Maniwaki village

Quebec—*Cont.*

on the 1st of July, and followed the Désert route to Lac des Rapides. This lake has two outlets, one southward to the Gatineau and the other northward, discharging part of its water into the Upper Ottawa at a place called The Barrière or Dam. From this locality, we followed the Ottawa down-stream, or westward, to Grand Lake.

Previous surveys by Mr. Cochrane.

"Leaving the northern extremity of Twenty-mile Bay, of Grand Lake, by a small brook, we crossed the height-of-land and descended to Shabogamag Lake, (properly, Shibogama, or lake of channels) referred to in connection with Mr. Cochrane's survey of 1887. Mr. Cochrane's map shows every topographical detail, and it was found to be sufficiently accurate for present geological purposes. Mr. Cochrane supposed the river he had been surveying below Shibogama Lake to be one of the branches of a river which ultimately fell into Hannah Bay. This was at that time, and it still is, the opinion of the few Indians who are aware of its existence, and we did not hear of any white man who had ever visited the stream up to that time, although many years ago a part of it may have been used by the Indian voyageurs of the Hudson's Bay Company. In this connection, I may mention that the lower parts of the stream are frequented by only one Indian, and that he came only a few years ago from the Abitibi region. His name is Taibi, and we had the good fortune to meet him at Grand Lake house, when he was on his annual trading trip to that post, and to engage him as guide for the river as far as he might know it. Although this man knew more of this river than any other person, he declared emphatically that it did not discharge into Rupert Bay, but 'somewhere between that bay and Moose River'; but in this he turned out to be quite mistaken. He had obtained his information from other Indians, who were supposed to know the facts.

Map of the Crown Lands' Department.

"Before leaving Maniwaki, I had requested and obtained from the Honourable the Commissioner of Crown Lands of Quebec, a tracing of a map by Mr. Henry O'Sullivan, P. L. S., showing the streams to the north-east of Grand Lake and thence northward to Waswanipi Lake. To the north of Grand Lake this map showed the route we were going to follow about thirty miles further than it had been surveyed by Mr. Cochrane in 1887, but without any details, such as were shown with great accuracy on Mr. Cochrane's map; nor had it the notes on soil, timber, etc., which are shown on the map, dated 22nd October, 1895, and published in the report of the Commissioner of Crown Lands, Quebec, for 1895. This was the only information I obtained from the Crown Lands Department in reference to the region explored.

"The existing sketch-maps show a river named Noddawai * entering the head of Rupert Bay and one named Hannah Bay River flowing into the head of the bay of that name. The upward course of both is represented as being south-east, so that the 'Hannah Bay River,' would, if this were correct, intercept the north-flowing river which we were about to descend from the neighbourhood of Grand Lake. Another stream, called West River, is usually represented on the maps as draining Michigami Lake and flowing into Hannah Bay, west of the river of that name. But the stream which drains Michigami Lake is not West River, but one bearing the same name as the lake itself, and it does not flow towards Hannah Bay, but north-eastward into the lower part of the Noddawai, thus crossing, nearly at right-angles, the course assigned to the so-called 'Hannah Bay River.' The stream which enters the head of Hannah Bay is called by the natives Wash-a-how-sipi, or Bay River. It rises to the south-east of Abitibi Lake, and its course lies to the west of Michigami Lake and river.

Quebec—*Cont.*

Drainage as shown by maps.

"The river which we descended was found to fall into the western part of a lake called Mattakami, or Mattagami, lying nearly at right angles to the general course of the stream. The same lake receives the Waswanipi, which is also a large river, from the east. The name Mattagami means 'lake at the meeting of two rivers.' From the north side of this reservoir the Noddawai, as a very large river, flows out with a northerly course of about 100 miles to Rupert Bay.

Course of Noddawai as now ascertained.

"Shibogama Lake, referred to in the report for 1887, is an expansion of the river which we descended to Mattagami Lake. The Migiskun (or fish-hook?) River flows at right-angles into the east side of this lake, and its source, which is near that of the St. Maurice, is probably further from the sea than that of any of the other branches of the river-system to which it belongs; but the stream which we descended from the height-of-land near Grand Lake, follows the course of what appears to be the central depression, and it also flows through the central part of the area of this river-system. For these and other reasons, the river we followed from the height-of-land to Mattagami Lake may, I believe, properly be considered the trunk stream and the Migiskun a branch. This line

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*This word means the Iroquois Indians, or perhaps more exactly, the Mohawk division of these people, in both the Otchipwé and Cree dialects. It is differently spelled by various authorities, but the pronunciation is intended to be nearly the same in all cases. The following are some examples of the spelling:—Noddawai—Admiralty charts of Hudson Bay. Nottaway and Notaway—Most sketch-maps. Nâdowé (Otchipwé for an Iroquoi Indian)—Bishop Baraga's dictionary. Nâtowew (Cree for Iroquois)—Père Lacombe's dictionary. Nahduwa ("Chippewa" for Iroquois, Mohawk)—Revd. E. F. Wilson's dictionary. Natoowâo (Northern Cree for Iroquois)—Revd. E. A Watkins dictionary. The first of these is adopted in this report.

Quebec—*Cont.*

of depression is continuous with the straight and narrow Twenty-mile bay of Grand Lake. A low sandy tract now separates the waters of the Upper Ottawa from those flowing north, and forms the watershed at the extremity of the bay just mentioned, but at a recent geological period, the waters of the Upper Ottawa probably flowed down the central stream of the drainage area above referred to. The change to the present conditions has probably been due to the relatively greater uplift of the continent to the north than to the south. This former diversion of the waters of the Upper Ottawa to James Bay, was fully described by me in a paper read before the Royal Society of Canada last May, of which abstracts were published in the *Journal of Geology* and the *Scottish Geographical Magazine* for July, 1895.

Hydrographic basin.

"The hydrographic basin drained mostly by the Noddawai River and its branches, appears to be larger than that of the Moose River or that of the Ottawa. The Wash-a-how, or Bay River, to the west and the Broad-back River to the east of the Noddawai may be properly included in this drainage area, which would thus embrace some 70,000 square miles. The basin, like that of the Moose River, is about as broad as it is long, and, as in the case of the former, the waters flow from all sides towards the northern margin. It lies immediately south-east of James Bay, just as the basin of Moose River lies to the south-west of it, and the one basin is a sort of counterpart of the other.

Wide level country.

"The elevation of the low divide between Grand Lake and the waters flowing north, is probably not much, if anything, over 1000 feet above the sea, and, as the surface of the basin under consideration is mostly level, as far as I could observe or ascertain, the greater part of it is probably under this level. The conditions were very similar throughout the entire distance and the country presented the same general appearance all the way from Grand Lake to James Bay. Isolated hills and ridges were to be seen occasionally from the canoe route. I ascended a number of these and in every case obtained a good view of the surrounding country. It always presented an even or slightly undulating aspect, with a hill or ridge here and there. To the westward of Gull Lake, on the Waswanipi River, the country is more hilly than elsewhere, and a rocky ridge runs along the south side of Mattagami Lake, with one point rising to the height of 670 feet above its level. I was informed by Mr David Baxter, in charge of the Hudson's Bay Company's post at Waswanipi Lake, that along the canoe route from Gull Lake to the Rupert River the country is almost uniformly low and level.

"The immediate banks of both the main river and its branches, are generally low, averaging only from five to fifteen feet, and it is only in places that they exceed thirty feet in height, although the ground usually rises at a short distance back from the water, and often attains an elevation of from 50 to 100 feet, especially below Mattagami Lake. For long distances, the land along the river-margins is very level and the trees grow quite to the water's edge. The higher scarped banks generally expose bouldery till at the bottom, with thinly stratified horizontal brown clay above, but when the banks are lower they show only the brown clay. The solid rock is commonly seen beneath the superficial deposits at the stronger chutes and rapids, and it forms many projecting points in the rivers and lakes. The brown clay appears to be spread over the greater part of the region, as the water of the main river and most of its tributaries is turbid, except that of the Migiskun, Waswanipi and Michigama. It has the same tint as the clay itself, and resembles that of coffee with milk. Marshes of limited extent occur in places along the rivers and around the lakes, but in looking over the country it was only occasionally that swamps could be seen. The slope of the ground and the ramifications of the numerous streams, appear to afford sufficient natural drainage to reach most of the land fit for cultivation.

Quebec—*Cont.* Surface and soil.

"*Timber.*—The white and red pine extend from the southward for a short distance beyond the height-of-land. Banksian pine is found, where suitable conditions exist, as far as Mattagami Lake, but its range towards James Bay is not restricted on account of the latitude, but by some other circumstance, for in a slightly more easterly longitude this tree ranges northward to Great Whale River, a distance of about 450 miles in a straight line from Mattagami Lake. Tamarack or larch, is abundant and of fine growth, but unfortunately most of the trees, throughout the whole distance from Grand Lake to James Bay, have been attacked by the grub of the recently imported larch saw-fly. A certain proportion of the trees have been already killed by this pest, and the remainder will probably die also if its attacks are continued for a year or two longer.*

Trees.

"White spruce is perhaps the most valuable tree of the district explored. It grows to a great size everywhere along the rivers and lakes, and although, as a rule, it may be larger near their banks, where it often girths upwards of six feet, a considerable proportion of the trees inland also attain a good size. In point of numbers

White spruce.

*In 1893 Mr. Low found the tamaracks in the interior of Labrador as far north as the East Main River, all dying from the same cause. Its ravages extend southward to the Gatineau Valley.

Quebec—*Cont.*

of individual trees, the black spruce takes first rank, and a large proportion of them are of a sufficient size for various useful purposes, such as fuel, building, railway-ties and wood for paper-making. Balsam fir grows in perfection, and is abundant throughout the district. White cedar is confined principally to the margins of lakes and rivers. Its northern geographical limit is slightly beyond the region explored, and it becomes scarce as we approach James Bay. White or canoe birch is a thrifty and abundant tree everywhere. Aspen or trembling-leaf poplar is the most common deciduous tree. The balsam poplar was not observed in the southern part of the great river basin, but was plentiful in the northern part. The timber is almost everywhere of mature age, or consists of old second-growths, and it will be of great importance to preserve these extensive forests, as far as possible, against fires, which have wrought such havoc in so many other districts. A few square miles have been destroyed by fire in recent years on the east side of Siskumika Lake, on the Noddawai, but with this exception we noticed only insignificant patches which had been burnt.

Possible agricultural value

"*Climate.*—The greater part of the region under consideration lies between latitudes 48° and 51°, or south of London. While it does not, like Western Europe, enjoy the advantages of an atmosphere warmed by ocean currents, neither does it suffer from the disadvantages of the chilling effect of the Arctic current, like Eastern Labrador. The climate may be considered as normal for the above latitudes. In estimating its probable suitability for agriculture, it may be mentioned that wheat ripens well at Lake St. John, to the eastward, and also, when tried at different times, at New Brunswick House, on the Missinaibi River, and at Newpost, on the Abitibi, to the west, while barley ripens at Rupert's House and Moose Factory, both of which lie to the north of this region. Newpost lies near the western border and to the north of the greater part of the tract in question, but a straight line drawn from it to Lake St. John would pass through the centre of the area.

Flora.

"The flora of the district may naturally be assumed to be identical with that of the adjoining basin of Moose River in the same latitudes. In 1877, I made a tolerably complete collection of the plants of this region, and Professor Macoun, botanist to this department, after carefully identifying the species, said that, judging from this flora, he saw no reason why wheat might not be successfully grown as a crop.

Crops.

"At Waswanipi post, a little to the north-east of the centre of the region, we saw potatoes and a considerable variety of vegetables all

doing well, although the soil at that particular spot is very inferior to the average of the district. Timothy and red and white clover, which had been accidently sown at this post, were also thriving. I did not hear of any experiments in grain-growing having been made at this establishment, but it was said that grain of some kind had been raised many years ago by the North-west Company's agents on land close to the present Hudson's Bay Company's post. Quebec—*Cont.*

"Last summer, we found the rainfall excessive. After the beginning of August, more or less rain fell every day, and often it was heavy and continuous for twelve to thirty-six hours. Thunder storms with heavy rain were also frequent. At Moose Factory we were told that the past summer had been the most rainy one in the memory of the present generation. Although the season was probably an exceptionally rainy one in the region we passed through, several circumstances indicate that a copious rainfall is the normal condition in this district. The ground under the dense coniferous forest is everywhere covered by a thick carpet of yellowish-green moss, and in favourable places along the Noddawai River, peat accumulates to a depth of from five to ten feet, and even more. The number of rivers, brooks and streamlets, full of water in the middle of summer, is unusually large, and the total quantity of water discharged into the sea is also great in proportion to the area. The difference in the amount of the discharge at the high- and low-water levels in the main river and its principal branches did not appear to be greater than the proportion of two to one, if so great. The average height at which the trees are barked by the running ice in the spring, is about ten feet. The conditions all over the drainage area are very favourable for holding back the water and thus regulating or equalizing its outflow. Among them may be mentioned the general level character and moderate slope of the whole region, the thousands of natural dams formed by logs and sticks lying across the smaller branches, and especially the thick coating of moss all over the surface, acting as a sponge saturated with water and draining slowly away. Rainfall.

"Again, the quantity of snow and the conditions under which it melts, must be considered in relation to the water supply of these rivers. Snow lying in the shade of the close evergreen forest, does not melt rapidly in the early spring as it does from among the deciduous trees which are leafless at that season, or, as in a cleared or open country, but is very slowly acted upon, and it lasts for about six weeks longer than it would if exposed to the sun. Mr. Baxter, of Waswanipi, informed me that the average depth of snow in the woods (where it does not drift) was considerably more than four feet. Snowfall.

Quebec—*Cont.*

Climatic irregularities in 1895.

"Notwithstanding the unusually wet summer at Moose Factory, the central and western branches of Moose River were lower in September than I had ever before seen them. But the Abitibi, which lies nearest the basin of the Noddawai, appeared to be moderately full when we passed its mouth about the middle of the month. At Moose Factory, we were told that these conditions had prevailed for some time before we started up the river. In connection with this subject, it may be here remarked that Mr. Low this summer experienced very wet weather in southern central Labrador; also that voyageurs on the Rupert River were troubled by frequent and heavy rains. From all the foregoing and other facts, it would appear that a dry summer prevailed to the south and west of the basin of the Noddawai, while there was an unusually wet one in and eastward of that region.

Storm of exceptional character.

"The extraordinary weather which we experienced at the time of the equinoxes may be worth noting here, as our position was far from any meteorological station, except that of Moose Factory. We were in the neighbourhood of 'The Forks' of Moose River, about fifty miles from Moose Factory. A severe thunder storm, with very dark sky and east wind, occupied most of the forenoon of the 20th of September. In the evening, an extraordinarily warm breeze, for that season, set in from the south-west and continued all night. At 9 p.m. the thermometer stood at 73° Far. The 21st was a fine and warm day, followed by rain at night. At our camp on the Missinaibi River, about twenty miles above 'The Forks,' it rained during the whole twenty-four hours of the 22nd, with a dark sky; distinct thunder was heard at times. Lightning and thunder, with heavy rain, continued throughout the night of the 22nd, and at daylight of the 23rd, a great gale sprang up from the south-west. This continued all day, the force increasing and diminishing at intervals. The water of the river drifted like snow, and it was impossible for us to move. We were obliged to place our canoes in the woods to prevent them from being blown away. The living forest trees were blown down in great numbers. Our camp was about 300 feet above sea-level. The barometer stood at 29·07 at 7 a.m. of the 23rd, and had risen to 29·94 at 7 a.m. on the 24th. On our journey south-westward from this place, we found that the trees had been blown over all along our route as far as the Canadian Pacific railway, a distance of more than 200 miles, but the destruction inflicted appeared to diminish gradually in that direction. For long distances, about half of the trees had been blown over, rendering it it almost impossible to force one's way through the woods. In many places, acres of the forest had been

prostrated bodily. Previous to this destructive gale, most of the trees which had fallen had had time to rot away, which must have required a period of fifty years or more, so that even if at any previous time they had been thrown down in large numers at once, such an occurrence must have been upwards of fifty years ago. Quebec—*Cont.*

"*Fauna.*—In the region explored, fur-bearing animals and game of all kinds were scarcer than might have been expected, and this circumstance probably accounts for the small number of Indians in the district. Caribou are found throughout the whole region, but not usually in any great numbers. Moose and Virginia deer are confined to the southern part. Only a few black bears were seen. The common American hare (or 'rabbit') was rather plentiful, but the chickaree or red squirrel was rare, notwithstanding the abundance of its favourite food, the cones of the balsam fir, and the two kinds of spruce. Fauna.

"The scarcity of ducks is owing partly to the absence of rice, although the conditions for it appear favourable, and it should grow well if introduced. Another reason is the great reduction which has taken place during late years in the number of the water-fowls in general which migrate to James Bay, owing to the drying of the salt marshes, and to their wholesale destruction in their winter resorts.

"Fish are abundant in all the waters. They consist of whitefish, sturgeon, pike, pickerel, gold-eyes, chubs, suckers and dog-fish. Neither speckled nor gray (lake) trout were seen, nor could we hear of their existence in the district, although the former may occur locally in clear cool streams, as in the case of the Upper Ottawa region and the Moose River basin.

"*Geology.*—The rocks along our route from Maniwaki to Grand Lake all belong to the Laurentian series and consist of gneisses with a little crystalline limestone in some places. To the northward of Grand Lake, Mr. Cochrane found Huronian rocks, with some gneiss, as far as he went. Gneiss occurs about the outlet of Shibogama Lake, but beyond that, rocks which may, for the most part, be classed as Huronian were found all along our route towards James Bay, till we reached a point about six miles northward of the outlet or the narrows of Mattagami Lake. A considerable proportion of the area, however, consists of granitic rocks, some of which may perhaps, on close investigation, be placed with the Laurentian, while others are probably true intrusives. Granite was almost the only rock observed on Waswanipi River between Gull and Waswanipi lakes. The boundary between the Huronian and Laurentian rocks runs westward from Noddawai River and crosses the north-west bay of Mattagami Lake. From the above-mentioned Huronian and Laurentian rocks.

Quebec—*Cont.*

point (about six miles northward of the narrows or outlet of Mattagami Lake), gneisses with some granitoid patches and occasional bands of micaceous and hornblende schists were the only rocks met with *in situ* all the way to Rupert's House.

"The Huronian rocks, in the region traversed, have a greater development than we had expected, and this circumstance adds to the prospective economic value of the country, since these rocks are more likely to produce valuable minerals than the Laurentian. Towards the southern side of the Huronian area, the general strike is north and north-north-westward; in the central part it is north-west, and towards the north side west-north-west to west. The rocks consist principally of a variety of schists, such as dioritic, chloritic, hornblendic, and micaceous and also slatey arkose, alternating with massive greenstones intersected by red and gray granites.

"Veins of quartz were frequently seen and some of them contained small quantities of iron- and copper-pyrites. As gold (generally in small quantities) frequently occurs in such veins in similar Huronian rocks elsewhere, it is very probable that it may sooner or later be found in this region also.

Glaciation and surface deposits.

"*Superficial Geology.*—The surface of the crystalline rocks is everywhere thoroughly glaciated. The general course of the striæ is south-south-westward, with local variations, but towards the northern part of the district there is also a newer set of grooves running south-easterly and close to Rupert Bay there were several local sets having other courses. From Grand to Mattagami Lake, the drift materials consisted principally of the débris of the local Huronian rocks, with a certain proportion from the Manitounuck and Devonian rocks of James Bay, the percentage of these latter increasing as we went northward. Beyond Mattagami Lake this percentage became very considerable, the remainder of the materials in that region consisting principally of Laurentian gneiss. The Manitounuck and Devonian drift had probably been first carried to the south-westward from James Bay and afterwards south-eastward when a change had taken place in the direction of the glacial movement. As already mentioned, the horizontally stratified clay in the higher cut-banks along the rivers was seen to be underlain by boulder-clay or till.

"In travelling by water through a densely wooded country like this, very little could be done in the way of observing any terraces or other evidences of former water-margins that may exist in the region. The first proof of the former submergence of the land afforded by fossils, was found only when we came near the head of tide-water, where the

clayey banks of the Noddawai are about seventy feet high, and in their upper parts contain the brackish-water varieties of a number of the commoner northern marine mollusca. Quebec—*Cont.*

"Before closing this report, I wish to express my obligations to Mr. Charles Logue, of Maniwaki, and to Messrs. W. K. Broughton, Donald McTavish, David Baxter, Captain Taylor, and other officers of the Hudson's Bay Company whom we met, for assisting me in various ways to carry out the objects of the season's operations."

Mr. R. Chalmers was, during the winter of 1894-95, engaged in working up for publication the results of investigations on the Surface Geology of New Brunswick and adjacent provinces, including part of South-western Quebec. His report, covering a portion of the work above indicated and accompanied by five maps, has since been printed. Work by Mr. Chalmers.

The field-work of the past summer was chiefly directed to the investigation of the auriferous districts of the province of Quebec, but a short visit was also paid to the salt spring at Saline, King's county, New Brunswick, on which a note is appended (p. 97). Mr. Chalmers reports as follows upon the work carried out :—

"On the 25th of May, I left Ottawa for the Eastern Townships of Quebec to begin field-work there for the season. The object of the work as stated by you in letter of instructions, was to ascertain more precisely than has yet been done, the relations of the alluvial deposits containing gold, (1) to the places of their origin, and (2) to the glacial drift of the region. In pursuance of this object, you further stated, 'it would be necessary to investigate the general character and sequence of all the superficial deposits systematically,' etc. Instructions and plan.

"In commencing the work thus outlined, it was considered best to examine the deposits in those districts where alluvial gold mining has hitherto been carried on, and where shafts and other excavations have been opened, the facts thus obtained being considered as more likely to elucidate the problems presented for solution. The gold mining operations have been practically confined, (1) to Beauce county, and principally to the valleys of the Chaudière River and its affluents, (2) to the valley of Little Ditton River, township of Ditton, and (3) to Dudswell Mountain, townships of Dudswell and Westbury. For the sake of brevity these will be called, the Chaudière area, the Ditton area and the Dudswell area. Outside of these areas no profitable gold mining has been carried on, although gold is known to occur, as shown by Dr. R. W. Ells,* in the alluviums, as well as in quartz, in a great

*Annual Report, Geol. Surv. Can., Vol. II. (N.S.), pp. 51 J-53 J.

Quebec—*Cont.*

number of localities between the international boundary and the range of mountains nearest the St. Lawrence River, known as the north-easterly extension of the Green Mountains.

"In the investigation of the auriferous gravels and other superficial deposits of these three areas, the principal part of the season was spent; but some weeks were devoted to the study of the glacial phenomena of the region, and to the work of tracing the post-glacial shore-lines along the northern slope of the Notre Dame Range.

Chaudière area.

"*Alluvial gold mining in the Chaudière area.*—Of the three gold-producing areas mentioned, the largest and most important is that of the Chaudière. This area has been worked for alluvial gold since 1846, and the total production in that time is said to be of the value of about two million dollars. For some years, however, very little gold mining has been carried on except in a desultory manner, at intervals, with pick, shovel, and rocker or sluice-box, and a number of locations which might be profitably worked are idle. This condition of things is said to be due to several causes:—First, to a lack of the knowledge and skill necessary to successful alluvial gold mining, as pointed out by Dr. Selwyn in his Report on Gold Mining in Nova Scotia and Quebec;* second, to the extravagance with which the mining has been carried on by those who operated on a larger scale than the local miner; and third, to the fact that large portions of the best mining lands are owned by private individuals and companies, who do not work them themselves, but hold these lands at such high values as to place them altogether beyond the reach of the ordinary miner. Other causes might be specified, one of which is said to be the difficulty of securing good titles in some localities. Taking everything into consideration, the gold mining industry in the Chaudière is heavily handicapped, and capital has very naturally shrank from investment there.

Present activity in mining.

The prospects of some revival are, however, becoming noticeable of late, especially in those portions of the area lying outside the De Lery seigniory, while some work has also been carried on in the latter district, especially in Gilbert River valley, by Mr. F. Wadsworth, of the American Gold Mining Co. of Boston, with Samuel Byrne, an old California miner, in charge. On the Du Loup, Mr. E. B. Haycock of Ottawa, who has a three-stamp quartz mill there, has been doing some good work in prospecting for gold-bearing gravels and testing the quartz found in numerous veins in the lower part of that river. Mr. John Blue, manager of the Eustis Mines, Capelton, and his son, have also been prospecting for gold in the alluviums of the Du Loup, with,

*Report of Progress, Geol. Surv. Can., 1870-71, pp. 275-76.

so far as I have been able to learn, encouraging results. Mr. Louis Gendreau, of Jersey Mills, worked at Chaudière falls for several weeks during the past summer, and extracted gold from the gravels there. Sluicing for gold was also carried on at the Devil's Rapids, Chaudière River, for a short time, but I did not learn the result. Late in the autumn, Mr. J. E. Hardman, the well-known Nova Scotia gold miner, began operations at St. George, Beauce county, and at the time of my leaving the field—October 17th—had started a tunnel from the bank of Chaudière up Slate Creek valley, expecting to reach the pre-glacial gold-bearing gravels in the old bed of that stream. Capt. Geo. Macduff, an experienced alluvial miner, was in charge of the work. Quebec—*Cont.*

"*Alluvial gold mining in the Ditton area.*—The Ditton area is another from which a large amount of alluvial gold is reported to have been taken, it is said, to the value of seventy-five thousand dollars or more. The richest deposits were met with in that part of the area known as the Pope mine, lots 39 and 40, range 9, Ditton. For some years, however, little or no mining has been done there except prospecting and testing for gold some of the numerous quartz-veins which occur in this area. That the alluvial gold of the Little Ditton valley is exhausted, does not seem reasonable to suppose; but the country along both sides is thickly wooded, and exploration difficult, and so far seems to have been carried on in a desultory and unskilful manner. Ditton area.

"*Alluvial gold mining at Dudswell.*—The Dudswell gold area seems to have been yielding satisfactory returns, at least to some of the parties lately operating there. From Kingsey Brook, lot 3, range 4, Dudswell, several thousand dollars worth of alluvial gold are reported to have been extracted within the last three years, and work is still carried on there by Mr. Chas. Rodrigue, and by Messrs. Copal, Mathieu & Co. Messrs. Osgood and Hall have a claim on the upper part of this stream, lot 4, range 4, Dudswell, which has been prospected, and promises well. Operations have also been begun on the first stream to the west of Kingsey Brook, flowing into St. Francis River, called Maynard's Brook, where gold washing was carried on by Mr. Frederick Harrison, on lot 1, range 6, Westbury, with, I am informed, fair success. Latterly, gold has been discovered in quartz there. Dudswell.

"Alluvial gold mining seems capable of being prosecuted at less expense at Dudswell than in the Chaudière, and perhaps, even then in the Ditton area, owing to the thinness of the superficial deposits overlying the gold-bearing gravels, and the narrowness of the valleys

Quebec—*Cont.*
Mode of occurrence of the gold.

"*Mode of occurrence of the alluvial gold.*—The mode of occurrence of the alluvial gold is nearly the same in all the three areas under review. The principal portion of the gold is found in pre-glacial gravels in the old river-beds, as was pointed out by Dr. Selwyn,* or in these gravels eroded and transported along the present river-bottoms by fluviatile action since the ice age. The general succession of the deposits in the areas which yield alluvial gold in the 'Eastern Townships' of Quebec, may be thus stated in descending order:—(1) Surface gravel and sand, stratified, sometimes auriferous in river-terraces, but not containing gold, so far as known, in quantities sufficient to pay for working. (2) Boulder-clay, of greater or less thickness, usually containing traces of gold. (3) Sand, or sometimes gravel, stratified (the 'quicksand' of the miners), containing traces of gold in some places but not in paying quantities, often absent. (4) Clay, usually fine-grained, stratified and compact (the 'pipe-clay' of the miners), not auriferous, so far as known, often thin or altogether wanting. (5) Gravel, usually yellow or oxidized throughout, stratified, compact, water-worn, containing boulders of all sizes up to two feet in diameter, but none glaciated; all the materials of local origin, evidently deposited in old river-beds; contains most gold. (6) Non-glaciated rock-surfaces, usually ochreous; if slates, the top layers for one to three feet down, often contain gold between the laminæ.

"The intermediate members of the series (3 and 4) are often wanting, but boulder-clay and yellow gravel (5) are generally present, the latter, however, often thin. It is the 'pay-gravel' of the miners, and in the bottom, close to the bed-rock, gold almost always occurs most abundantly. The compact 'pipe-clay' of the miners (4) is regarded by them as indicating gold in the gravels beneath, if any gravels are present.

Section of surface deposits.

"*Pre-glacial rivers and origin of the yellow gravels.*—The pre-glacial rivers appear to have followed channels on one side or the other of the existing river-valleys, somewhat different from those which the rivers now occupy, and the Chaudière and Du Loup, at least, have flowed at lower levels. The present rivers cross the ancient river-beds at various points. In pre-glacial times, however, there would seem to have been a filling up of the river-channels by sediment, in some parts of the valleys, at least, as at the present day, while in others there would probably be erosion. The materials of which these pre-glacial river sediments are composed, are such as have been carried down off the slopes by the sub-aërial and fluviatile agencies which

*Report of Progress, Geol. Surv. Can., 1870-71, pp. 275-76.

were in operation at the time, and brought into the valleys by tributaries. The gold contents would seem also by these means to have been transported greater or less distances from their parent sources, and concentrated in the sediments along certain parts of the ancient river-courses When the ice of the glacial period advanced over the region, it failed to plough up and carry away many of these deposits, especially where they were protected by the inequalities of the surface, and hence their preservation to the present day. The rivers, in excavating their post-glacial channels have, however, cut through the boulder-clay, and also these pre-glacial river-sediments in certain parts of their courses, distributing the materials along the valley below, and again assorting and scattering the gold contents along the river-bottoms. In this case, the gold occurs most abundantly in the lee of protecting reefs and ledges, and as in Kingsey Brook, at Dudswell, of even the large boulders, as referred to later on. Where the yellow pre-glacial gravels have not been altogether denuded, however, and are auriferous, the gold in them, is regarded by the miners as following 'leads,' that is, has originally been concentrated along certain zones or bands by the action of the pre-glacial rivers.

Quebec—*Cont.*

Subsequent changes.

"*Localities where the yellow auriferous gravels were observed in the Chaudière area.*—In the Chaudière area, sections of the superficial deposits were examined in a great number of localities, and auriferous gravels were noted in the old river-beds in the following places:—In the Chaudière Valley at the falls and at the Devil's Rapids; in the Du Loup Valley at the mouth of Gold Stream; at Humphrey's pit, a short distance below that, and at the Star Gold mine near the mouth of the river, where an excellent section is exposed, which will be described presently. In Slate Creek gold-bearing gravels occur, also along the Famine River below the falls, where the St. Onge Bros. tunnelled, and again near the upper falls. In the Gilbert River valley they seem to extend along the old river-bed almost continuously, though in some places apparently as a very thin sheet lying on the bed-rock. In Rivière des Plantes, these deposits were also observed in several places, and on the north bank of Meule Creek, a branch of Mill River, opposite St. Francis village, there seems to be an extensive deposit.

Occurrences of auriferous gravels.

"The remarkable series of superficial deposits occurring on the north bank of Rivière du Loup, about a quarter of a mile from the mouth, in hydraulic pit No. 1, Star Gold Mine, already referred to, may be briefly described, as it affords a section exhibiting the general character and sequence of the pre-glacial and glacial deposits in the Chaudière

Section of Rivière du Loup.

Quebec—*Cont.*

area better than any other known to me. In descending order, the following beds are disclosed:—(1) Surface gravel and sand, 1 to 3 feet. (2) Unstratified boulder-clay, containing glaciated boulders from 5 feet in diameter downwards—some of them foreign to the locality, 37 to 38 feet. (3) Irregularly stratified boulder-clay, apparently in lenticular beds, with glaciated boulders and pebbles, 15 feet. (4) Unstratified boulder-clay, more compact than No. 2—boulders not so large, and a greater number from local sources, 20 feet. (5) Tough, dark-gray stratified clay, with sandy layers which are ochreous in places, 1 to 3 feet. (6) Stratified, gray, ochreous sand, containing a few pebbles, 12 to 14 feet. (7) Compact stratified clay, with variegated bands and an occasional layer of sand; the whole deposit full of joints and breaking into rhomboidal-shaped pieces ('pipe-clay'), 6 feet. Divisions 5, 6 and 7 maintain a strictly horizontal attitude as seen on the west side of the pit, but the bottom of No. 7 rests on the surface of a gravel-bed which slopes slightly to the north, *i. e.*, away from the river, the slope being about 2 feet in 40. (8) Gray stratified gravel, containing numerous pebbles and a few boulders, water-worn. In the bottom lies a sand bed 8 or 9 inches thick, containing scarcely any boulders or pebbles; material local, non-glaciated; strata dipping northward as described above, 5 feet; these gravels and sands slightly auriferous. (9) Yellow, oxidized, hard gravel, stratified, containing numerous worn boulders from 2 feet in diameter downwards, of local origin, non-glaciated; strata dipping as in above division of series. The bottom of this member of the series was not seen, being covered by tailings and *talus*, but it is supposed to rest on ledges which crop out in the river's bed, and to be probably as low as these. It is auriferous; thickness about 28½ feet. The transport of the material of these pre-glacial beds seems to have been in the direction of the flow of the present Rivière du Loup; (10) non-glaciated rock-surfaces near by, jagged and broken, with gold in the crevices.

Conditions of deposition implied.

"This section exhibits several noteworthy features which can only be referred to here. These are:—(1) the bipartite division of the boulder-clay, (2) the great thickness of the pre-glacial beds, about 45 feet, and (3) the change in the character of these from the bottom to the summit, denoting changes in the conditions of deposition and of drainage. The lower coarse beds have apparently been laid down in rapidly flowing and shallow waters; the clay beds in the upper part in deeper and quieter waters, probably in a lake-like expansion of the Du Loup and Chaudière rivers at their confluence. But what caused the supposed deepening of the waters here at that time? The conditions of deposition are probably to be sought for in the changes which seem to have taken place in the attitude of the region just previous to the advent of the ice age.

"*Auriferous gravels of the Ditton gold area.*—Passing to the Ditton gold area, we find the succession of the superficial deposits at the Pope mine, the only place where a section could be seen here, to be about the same as in certain valleys in the Chaudière area, viz., (1) stratified water-worn material; (2) boulder-clay; (3) yellow oxidized pre-glacial beds, thin and irregular,—auriferous, especially in the bottom; (4) decomposing slates, highly ferruginous, surface non-glaciated, open and fissile to a depth of 1 to 3 feet, and containing gold between the laminæ. It is in the latter that the most gold occurs.

Superficial deposits of Ditton.

"*Auriferous gravels of the Dudswell gold area.*—In the Dudswell area, the yellow pre-glacial gravel was seen in Hall's Stream, where alluvial gold mining was formerly carried on. Work was stopped owing to the difficulty of keeping the shaft and drifts free from water. The superficial deposits at this mine are about 40 feet thick, but I could obtain no exact information respecting the thickness of the constituent beds.

The section at Dudswell.

"On Kingsey and Maynard's brooks, to the west, the glacial and pre-glacial deposits which may have formerly occupied their valleys, have been largely denuded and reassorted by fluviatile action since the ice age, and the gold contents scattered about in the bottom of these. In the portions of the valleys thus denuding by the streams, the deposits seldom exceed a thickness of three or four feet. A section of these on Kingsey Brook, in descending order, is as follows:—(1) One to three feet of mould, or alluvial wash, becoming coarser in the bottom. (2) Gravel, brown and ochreous, with angular or slightly worn pebbles, and a few boulders, some of which are from five to ten feet in diameter; there stand up above the surface, and are glaciated; materials of the gravels, local, or transported only short distances by the stream. They contain gold; thickness, one to two feet. (3) Compact ochreous gravel, in detached masses; materials as in No. 2, but so hard that a pick is required to remove them; this is apparently the equivalent of the yellow gravels of other river-valleys,—the remnants which escaped denudation; contains gold; thickness from three inches to two feet. (4) Gray, slaty, or schistose rock, non-glaciated; in the crevices of this and below reefs and ledges, or in the lee of the large boulders, most gold is found in the bottom of the gravels.

"The succession of the deposits and the mode of occurrence of the gold are very much the same in Maynard's Brook as in Kingsey Brook. The valley of the former is rather wider, and the beds rather thicker. The great advantage of alluvial mining in Kingsey and Maynard's brooks, thus far, is that no shafting or tunnelling is required, the

Quebec—*Cont.*

superficial beds not being more than from three to six feet thick, except in the flat ground, where the streams debouch from the mountain upon the plain.

Sources of gold local.

"*Source or sources of the alluvial gold.*—The sources of the alluvial gold are supposed, in view of all the facts thus far obtained, to be mostly, if not altogether, local. The unworn condition of much of the 'coarse gold,' the local character of the materials composing the pre-glacial, auriferous gravels, and the fact that there were no known agencies in the region in pre-glacial times to transport either the gravel or its gold contents, except atmospheric and fluviatile, all tend to support the conclusion that the precious metal cannot have been transported far. While this is true of the gold found in the pre-glacial bottom gravels, and embedded in the rotten rock beneath these, the gold met with in the shallow deposits of the present river-bottoms, also in the boulder-clay and in the post-glacial river-terraces, may have been carried further, the fine 'scale gold,' indeed, considerable distances. The reason of this seems to be that the latter has been subjected to a second transportation since the ice age, either in the boulder-clay, or in the denudation of the river-valleys and slopes.

Circumstances on the Chaudière.

"Though the above view regarding its local origin is generally accepted, the gold has not been traced to its source in the matrix in any part of the 'Eastern Townships,' except, perhaps, at Dudswell. Alluvial gold has been mined in the Chaudière area for fifty years, yet no free visible gold has been found in veins there to this day. Nuggets, with quartz attached, have been picked up in several places, notably at the Devil's Rapids, near St. Francis; and a number of quartz-veins have, on assay, yielded traces of gold, (one of these, at the falls of the Bras River, having a small quantity of felspathic rock associated therewith and carrying some iron-pyrites, showed, on assay in the laboratory of the Survey, a trace of gold); but the true sources of the alluvial gold of the Chaudière have yet to be discovered. The veins from which it is derived probably traverse parts of the area not yet prospected, and though near the deposits of auriferous gravels, are most likely covered with boulder-clay, and perhaps by the forest. The irregular, broken ridge which crosses the Chaudière Valley at the Devil's Rapids, seems to me to be one locality where gold-bearing veins might be looked for, as the rich gold-producing valleys of the Gilbert River and of Meule Creek occur on either side. Both slopes are largely covered with drift. The ridge along the south-eastern side of the Famine River might also be prospected with advantage, as well as a number of other places, more especially where diorites and other intrusive rocks occur. While the quartz-veins along the river have been

repeatedly examined, those upon the higher grounds have been to some extent overlooked. Quebec—*Cont.*

"The source of the gold of the Ditton area is as problematical as that of the Chaudière. Quartz-veins are numerous in the slates, but none have hitherto yielded free gold. The difficulty of prospecting here has already been alluded to. At Ditton.

"The Dudswell area has afforded better results in the search for gold in the matrix than either that of Chaudière or Ditton. The coarse character of much of the gold found there and the comparatively unworn condition of the gravels, show that the source must be in the Dudswell Mountain. The total area of the mountain is limited, and it could easily be examined were it not that it is still forest-clad. The small auriferous quartz-vein discovered on lot 1, range 6, Westbury (Harrison gold mine), cannot be the source of the alluvial gold of this area, being lower, and to the south of its place of occurrence, but proves the existence of gold *in situ* in the vicinity. This vein is only an inch or two wide, but cuts a bed of gray arkose conglomerate, of which specimens showing no free gold were subjected to assay in the laboratory of the Survey and found to contain 0·35 ounces to the ton. It is possible that this deposit may prove to be of a workable character. At Dudswell. Gold in conglomerate.

"*Localities where alluvial gold might be sought for.*—The gold-bearing gravels of the several rivers, within the areas where alluvial mining has been prosecuted, have only been partially worked, mining having been carried on apparently in those parts of the valleys where the deposits are of least depth. The lower parts of the Gilbert and Famine rivers, also Mil River and the great valley of the Chaudière itself, below the Du Loup, have not yet been worked for alluvial gold. The pre-glacial valley of the latter, especially between the falls, or mouth of the Du Loup, and the Devil's Rapids now forms a deep trough occupied with a heavy bed of superficial deposits. Into this trough the Du Loup, Famine, Gilbert, Pozer's stream, etc., must have carried large quantities of gold. Along the western bank of this part of the valley, there must also be considerable deposits of pre-glacial gravels buried beneath the boulder-clay. This seems to be a promising field of investigation, at least, for the practical alluvial miner. Localities deserving examination.

"In Ditton, the north bank of the river at and above the Pope mine, might be more carefully examined and prospected for gold. It seemed to me that there are yellow gravels along that bank beneath the boulder-clay. The heaviest ice passed over that district from north to south, apparently filling in the pre-glacial valley on that side. Thick deposits of superficial materials occur in that vicinity.

Quebec—*Cont.*

"At Dudswell, further exploration would seem to be required on the summit of the mountain, near the sources of the streams along which gold has been found. The terraces or flats along the south-eastern base should also have gold beneath, especially where the streams debouch from the mountain upon them. These streams, flowing as they do rapidly in narrow valleys, must have carried down considerable quantities of gold to places where the currents slackened. Exploration in these terraces had commenced late in the autumn.

"The foregoing brief statement of the results of investigations during the past season, merely touch on a number of the questions relating to the gold-bearing deposits of the region, and many of the facts obtained will have to stand over till a detailed report is written.

Glacial phenomena.

"The following is a synopsis of the more important observations on the glacial phenomena:—

"The courses of striæ given by Dr. Ells in his reports on the geology of the 'Eastern Townships' seem, so far as I have examined the region, to be mainly correct.* The ice-movements have been widely divergent, and the facts relating thereto are extremely perplexing, and appear to be explicable only on the theory of two, if not three, systems of glaciation by land ice, and probably one by floating ice. The chief difficulty lies in the classification of the different sets of striæ. West of the watershed separating the St. Francis waters from those of the Chaudière, our observations are disconnected and incomplete; but in the area to the east of that watershed and of the head-waters of Becancour River, a considerable body of facts has been collected indicating the

First system of striation.

ice-movements pretty clearly. First there would seem to have been a northward ice-flow, whether entirely independent of the Laurentide glacier or not, remains to be determined. The direction of movement of this ice varied from N. 45° E. to N. 15° W.,† but was principally between N. 15° E. and N. 10° W. The striæ have been traced from the higher grounds near the international boundary down to the border of the marine plain of the St. Lawrence Valley. In many parts of the region they have been effaced by later ice, but where they dominate, as in Tring and Broughton townships, west of the Chaudière Valley, and in Cranbourne, Frampton, the Etchemin River valley and eastward, the subsequent glaciation by ice moving south-eastward and

Second system of striation.

eastward has either been light or wanting. Following this system of glaciation, there seems to have been an invasion of the region by the Laurentide glacier, which brought in boulders and strewed them pro-

* Annual Report, Geol. Surv. Can., vol. II., pp. 46J-48 J, and vol. III., p. 99 K.

†The courses of striæ are all referred to the true meridian.

fusely over some parts of the country up to a height of 1500 or 1600 feet. This ice defaced the earlier striation in most places, and in the valleys of the Chaudière and St. Francis almost entirely obliterated it. The evidence is wanting to show that it overrode the higher summits of the mountain range nearest the St. Lawrence, especially to the east of where the St. Francis River traverses it. Great tongues of the Laurentide glacier have moved up the valleys of the St. Francis and Chaudière, however, and from the latter it seems to have spread out fan-like, south-eastward, eastward and apparently north-eastward. St. Anselme Mountain, about fifteen miles south-east of Quebec, and 650 feet high, presents an abrupt face to the St. Lawrence with *talus* at the base, while its summit is glaciated in the direction of N. 30° E. and N. 40° E. The N. 5° W. and N. 10° W. sets of striæ are also common in this locality. Quebec—*Cont.*

"A portion of the Laurentide glacier, or of the ice which distributed Laurentian boulders, passed over the low divide between the Chaudière and St. John waters, which is only 1200 or 1300 feet high, in the direction of S. 60° E. to S. 75° E. Extent of Laurentide glacier.

"The Laurentide glacier seems to have stossed some portions of the north side of the mountain range nearest the St. Lawrence River, especially that between the Chaudière and St. Francis rivers. My examinations have not yet extended further westward.

"Ice flowing southward to south-eastward, occupied a considerable part of the drainage-basin of the St. Francis and its tributaries, and Laurentian boulders occur in many places. Whether this ice overrode the range along the international boundary has not yet been determined. Other ice-movements are shown to have occurred in this area by Dr. Ells, and the facts relating thereto were also observed by me.

"On the withdrawal of the Laurentide glacier from the 'Eastern Townships' region, many local glaciers seem to have occupied it, flowing in different directions, and producing a great number of divergent courses of striæ. Local glacier

"The facts observed respecting the action of floating ice in the St. Lawrence Valley are still meagre and scattered.

"*Boulder-clay and boulders.*—The boulder-clay as seen at Le Rocher, in the Chaudière Valley, and near Dudswell in the valley of the St. Francis, show, as at Rivière du Loup, in the section described on a previous page, a bipartite division. At Le Rocher, the lower division is of a dark gray, or bluish-gray colour. Then occurs a stratified band, overlying which is a gray boulder-clay. The deposit in the bank of the St. Francis Boulder-clay.

Quebec—*Cont.*

appears to be of much the same character. The far-travelled and larger boulders appear to be in the upper part. Owing to the sliding down of the beds a good view of the exposures could not be obtained, and it is not yet known to what extent the division may be of classificatory importance.

"Laurentian boulders are abundant in certain areas, while in others they are entirely wanting, their distribution evidently depending upon the movements of the ice which occupied the region. At St. Odolin, which is 1300 feet high, the Roman Catholic church is built of blocks of Laurentian granite, gneiss, etc., hewn out of boulders collected within a radius of a few miles.

Terraces and beaches.

"*Changes of Level in the Region.*—The evidences relating to changes of level in the region during the post-Tertiary period, were investigated along the south side of the St. Lawrence in several places from Rivière du Loup, Intercolonial railway, westward as far as Ste. Julie and Arthabaska stations, Grand Trunk railway. Within this distance, a number of the highest marine terraces and benches that could be found were levelled by aneroid, working from the railway stations. Facing the open St. Lawrence Valley, as these terraces do, there can be no doubt as to their marine origin.

Height of shore-lines on on north side of Notre Dame Mts.

"South-east of St. Charles Junction, Intercolonial railway, on the road from St. Gervais to St. Lazare, a shore-line occurs at the height of 540 to 550 feet.* Above St. Anselme, on the west side of Etchemin River, another was seen at 620 feet. About two miles south of Ste. Henedine, Quebec Central railway, the highest shore-line is 750 feet. A lower terrace lies nearer Ste. Henedine station at 715 feet. In the Chaudière Valley near Ste. Marie, 740 to 750 feet on the east side, and 760 feet on the west; and near the head of Beaurivage River, 835 feet. From three to four miles south-east of Ste. Julie station, Grand Trunk railway, three terraces, 855, 865 and 895 feet; and on road leading from the same railway to St. Joseph Lake terraces occur at northern base of mountains at 720, 755 to 765 feet and at 860 feet. Denuded gravel hills and mounds rise above these to 885 or 890 feet. This is as far west as I levelled the shore-lines on the north side of the range.

Height on south-east of mountains.

"On the south-east side of Dudswell Mountain, an extensive terrace or beach abutting against it, is 840 to 850 feet high, and at the north end of Lake Memphremagog terraces of stratified gravel and sand were noted 860 to 865 feet high. The two last localities are on the south-east side of the range nearest the St. Lawrence and within the drainage basin of the

*The heights are above mean tide-level.

St. Francis River. Other terraces were observed in the region, but whether they are marine is doubtful. Quebec—*Cont.*

"Evidences of still more local changes of level, and of uplifts and dislocations were seen in some places. At St. Evariste de Forsyth, a ridge of slate shows some remarkable displacements since the surface was glaciated, one band having been pushed up five feet and a half above the apparently undisturbed rocks on the north side. Similar occurrences are frequent in this region, the displacements, however, seldom exceeding a foot or so. The most notable example of local upheavals, is that of the ridge of intrusive rocks which crosses the Chaudière Valley at the Devil's Rapids. The surface of these in the river-channel is higher than any part of the rock-bottom of the Chaudière above the rapids, as far up as the mouth of the Du Loup, as shown by shafts sunk in two places. As there does not appear to be any other course by which the river could have passed, this uplift must have taken place since the channel of the river below the Du Loup was eroded. This rock-rimmed portion of the Chaudière Valley is that to which I have elsewhere alluded as being probably a receptacle for the gold carried into it by the streams on both sides. Evidences of differential elevation.

"The examination of the gold areas occupied the principal part of the season up till the 9th of September, after which I was engaged in the investigation of the glacial phenomena, surface deposits and elevated marine shore-lines of the region on both sides of the Chaudière to the north and east of the gold area, including the drainage basin of the Etchemin and Rivière du Sud, and along the south side of the St. Lawrence Valley to Montmagny and L'Islet. Subsequently, an examination of the country west of the Chaudière Valley was made, crossing and re-crossing the range of mountains nearest the St. Lawrence River as far westward as Wolfstown and South Ham. A further investigation of the Dudswell gold area was then made, after which I returned to St. Francis by the lakes—Weedon, Aylmer and St. Francis—and through Winslow, Forsyth and Tring. A trip to the upper part of the Du Loup River was then undertaken, and the mines on lot 1, range 7, Marlow, examined and some mineral specimens collected. Returning to St. Francis, a number of points were afterwards examined along the railway lines till the close of field-work. Time occupied in the work.

"*The Salt Springs at Salina, Kings Co., N. B.*— Salt springs, New Brunswick.

An examination of the salt springs at this place was made, and samples of material from the bore-hole and of brine from a spring near by, were forwarded to the laboratory of the Survey for analysis. The boring was 330 feet deep at the time of my visit, disclosing: (1) super-

Quebec—*Cont.*

ficial deposits, 64 feet; (2) gypsum, 21 feet; (3) sandstone, 15 feet; (4) gypsum, 220 feet; (5) sandstone, 10 feet. The pre-Carboniferous rocks were apparently not reached.

"As the beds here are nearly vertical, the above measurements do not represent the actual thickness of the several deposits.

"Field-work closed on the 18th of October, and on the 23rd I reached Ottawa."

Work by Mr. Low.

During the early part of the winter, Mr. A. P. Low was engaged in writing a preliminary report on the explorations of the previous two years, and, with the assistance of Mr. D. I. V. Eaton, in preparing a map of the surveys made. The latter part of the winter was occupied in the compilation of a general report embracing the work of the preceding three years' explorations in the Labrador Peninsula.

Labrador Peninsula.

In June, Mr. Low was instructed to undertake an exploration by way of the Manicuagan River, which flows into the Gulf of St. Lawrence from the north, some 220 miles below Quebec, the object being to gain further information on the country near the central watershed of the Labrador Peninsula. Mr. Low was assisted in this expedition by Mr. Eaton, who carried out the necessary topographical work. After his return, in the autumn, Mr. Low was engaged for ten days in the vicinity of Three Rivers in further defining the outcrops of the several Palæozoic formations between the St. Lawrence and the Archæan region to the northward, for the purposes of the north-west sheet of the "Eastern Townships" map.

The subjoined preliminary report on the exploration above alluded to is given by Mr. Low:—

Exploration of Manicuagan River.

"At Quebec, provisions and outfit were obtained, and with four canoemen from Lake St. John, we left on the steamship 'Otter,' and arrived at Bersimis on the 24th. Here two Indian guides were secured, and also six extra canoemen, who were engaged to assist in the transport of provisions to Lake Mouchalagan, some two hundred miles above the mouth of the Manicuagan River.

"On account of head winds, the mouth of that stream was not reached until July 1st. A survey of the river to the head of Lake Mouchalagan had been made by the Crown Lands Department of Quebec, and in consequence no surveys were started until that point was reached; but the geology and natural resources of the intermediate regions were carefully examined, and located on a tracing of the previous survey.

"Fine weather and long hours, enabled the party to reach the outlet of Lake Mouchalagan on the 12th July, or about ten days ahead of the time estimated by the guides at starting. From here, the extra men were sent back to Bersimis, and the whole loads were transported in four canoes to the head of the lake, where the micrometer survey work was commenced. Owing to the rapid current in the river, double loads were made for the first thirty miles, passing over on the way, two miles and a half of portages, where the route leaves the river-valley and rises more than five hundred feet to a chain of small lakes, to avoid a cañon, in which the river, for over six miles, descends between almost vertical walls in a continuous heavy rapid. Labrador Peninsula—*Cont.* Head of Mouchalagan Lake reached.

"This portion of the work was accomplished on July 21st. A câche was now built, and in it were stored all extra baggage and provisions not required for the next six weeks, which was the time estimated by the guide as necessary to explore the head-waters of the main branches of the river.

"The Indians do not ascend the main stream beyond the point where the câche was made, being unable to do so on account of its rapid character and high rocky banks, which preclude portaging. The hunters of this region generally ascend in their canoes to the neighbourhood of the câche, and there await the snow and ice before journeying further northward, when they haul their canoes and outfits northward on toboggans. In the spring they descend from the heads of the various branches in their light canoes, making only one load over the portages. On this account, the portages of the upper country are exceedingly rough and often hardly marked.

"From the câche, the stream was left, and the best and easiest portage-route to the height-of-land was followed. It passes out of the river-valley on the west side, following a small tributary through a chain of little lakes. The first portage is upwards of one mile and a half long, with a rise of over six hundred feet. The route next leads, in a zigzag manner, through small lakes and ponds and along crooked, small streams, with many connecting portages, in a direction almost due west, to Lake Matonipi. The distance in a straight line from the river is only thirteen miles, but is upwards of twenty miles by the crooked route, the portages numbering thirteen, with a total length of seven miles and a rise of more than one thousand feet. Lake Matonipi is some five miles long, and discharges by a small stream into the Outardes River. Mouchelagan to Matonipi.

"From this lake, the direction of the route changes to nearly due north, and ascends rapidly to the high rolling ground northward of

Labrador Peninsula—*Cont.*

the lake, following the valley of a small tributary to its head, some eight miles away from the lake, and at an elevation of six hundred and eighty feet above it. Of the eight miles of route, only two are water, the remainder being made up by six exceedingly rough portages.

Portage route thence to the height-of-land.

"A portage of a mile next leads across a summit which divides the waters of the Outardes and Manicuagan rivers. Passing through a small lake, a portage of over seven miles leads to and along a small stream, which is then descended some three miles, where it is left by two portages with small lakes, followed by a portage of three miles and a half to another tributary. Next, nine small lakes connected by portages were passed through to another small branch of the Manicuagan, which was followed about three miles and then left by a ten-mile portage-route, which ends in Lake Kichewapistoakan on the south-west branch of the Manicuagan River. The portages along this part of the route are ten in number, and aggregate eight miles in length. Where the south-west branch was reached, it was found flowing with a sluggish current, in a deep channel about fifty yards wide. There is a wide area of swampy land on either side, extending on the north side about ten miles, to the foot of a high range of barren hills, which forms the watershed between streams flowing south into the St. Lawrence and the head-waters of the Big River of Hudson Bay.

"The south-west branch of the Manicuagan River, takes its rise near the sources of the Outardes and Peribonka rivers, some fifty miles to the south-west of where the portage-route reaches it. From its head it skirts the southern base of the high, barren hills, and is fed by many small streams from their southern slopes.

Lakes Attikopi and Attikopis.

"This stream was followed in a winding course for twenty miles, to Lake Attikopi, a body of water about three miles wide and six miles long, full of deep bays and covered with islands. Another large stream flows into this lake from the northward. This last-mentioned stream was then ascended in a general north-easterly course for twenty miles, to Lake Attikopis, where a second câche was made, and everything not required for a week's flying trip left behind.

"A portage-route through small lakes was now followed almost due west, eight miles, to the water-shed dividing the Manicuagan from the Big River. Crossing this height-of-land, a small stream connecting a number of little lakes was descended westward thirty-five miles, until the stream emptied into a large irregular body of water, deeply indented with narrow bays and almost covered with islands of all sizes. This lake is called Naokokan, and it southern shore was traced some thirty miles, to its western end, passing on the way a large stream flowing in

Lake Naokokan and Nichicun.

and said by the guide to be the main branch of the Big River, which rises close to the heads of the Outardes and Peribonka rivers some fifty miles to the southward. Labrador Peninsula – *Cont.*

"A hill of 400 feet, at the west end of the lake, was ascended, from which a fair view of the surrounding country was obtained. The lake was seen stretching to east and north for many miles, but so filled with large islands and broken by long points that it presented the appearance of a multitude of small lakes. A high chain of hills bounds the northern and eastern horizon. As five of the seven days allowed for this trip were now past, we were forced to return to Attikopis without reaching Nichicun, which is situated on the discharge of Naokokan, and probably only a few miles from where we turned back; but from our lack of knowledge as to where the discharge might be, and of the irregular shore-line of the lake, several days were likely to be required for its discovery, especially as the weather was at this time very unfavourable, with continuous rain and fog.

"After again reaching Lake Attikopis, a small stream flowing into the lake was ascended in a north-easterly direction, through five small lakes to a portage separating the waters of the Attikopis branch from those of the main stream. Continuing in the same direction through six small lakes, the general bearing of the route changes to east, and in twelve miles reaches Lake Itomamis, after passing through three lakes connected by a considerable stream. A short stretch of rapids connects Itomamis with Summit Lake, which lies almost on the 53rd parallel of north latitude. It is seven miles long and occupies a deep valley between ridges of semi-barren hills that run north-and-south. The lake has two discharges of about equal volume, both sufficiently large for canoe navigation. The northern discharge, with a short rapid, empties into the first of a number of long narrow lakes that fill the northern extension of the valley, and that finally empty into Lake Kaniapiskau, and so reach the Koksoak or Ungava River. The southern discharge forms the chief branch of the Manicuagan River. After surveying Summit Lake, the main stream was followed southward. On leaving Itomamis Lake it has a breadth of thirty feet with an average depth of one foot in rapids, and being joined by many considerable streams from valleys on both sides, it soon becomes a large river. For eight miles below Itomamis Lake, the river is formed of small lake-expansions connected by short rapids. It then contracts and descends in a deep narrow valley, in an almost continuous rapid, for twenty-four miles, to the junction of the Attikopi Branch. A sur- Attikopis to Summit Lake. Descend main branch of Manicuagan.

Labrador Peninsula—*Cont.*

vey was carried some twelve miles up this branch, in order to connect with that of the trip northward.

"Below the forks, the main stream spreads out into a number of shallow channels, separated by long low islands, between which it flows with a swift even current for eight miles. Beyond this, the river again narrows and passes into a deep valley with rocky banks, down which it swiftly flows with almost continuous rapids for forty-five miles, to the place where it was previously left by the portage-route. While descending this portion of the river, owing to the accidental upset of a canoe, one of the Indian guides named Paul Bacon was unfortunately drowned in the heavy waters of the rapids, and although search was made for his body along the river-banks for many miles below, nothing was seen of it, nor of the canoe which was lost at the time of this disaster.

Canoeman drowned.

Return journey.

"The câche was reached on the 25th August; and from there, the river was descended to its mouth, where we arrived on September 1st and then returned to Ottawa on the 5th of September.

Physical features of the region.

"The physical character of the region visited is similar to that of the rest of the Labrador Peninsula. Within a few miles of the coast, the country rises into an irregular, rocky plateau, upwards of one thousand feet in elevation, but having a further gradual rise towards the interior, so that near the central watershed the general level is nearly two thousand feet above the sea.

"From its mouth to the head of Lake Mouchalagan, the Manicuagan River flows in a deep, ancient valley from a quarter of a mile to two miles wide, with steep, rocky walls rising from five hundred to fifteen hundred feet above the water, and usually flanked with high terraces of stratified sands, gravel and clay. The river, especially towards its mouth, is broken by a number of falls and chutes, where the channel narrows greatly and the large volume of water pours in a swirling mass downwards between perpendicular rocky banks. None of these cañons are of great depth or length, nor do they compare in grandeur with those of the Koksoak and Hamilton rivers. They may be of more recent origin than these.

"Lake Mouchalagan is formed by a widening of the valley; it is upwards of forty miles long, and varies from one to two miles wide. Its surface is about nine hundred feet above sea-level, and it is remarkable for its great depth of water, the deepest sounding taken being six hundred and fifty feet, or some two hundred feet deeper than any previously known lake in Labrador.

"Above this lake, the valley of the river continues northward, but, as the river now flows down it with a heavy grade, the walls of the valley gradually become lower, so that at Summit Lake, the water-level is not more than three or four hundred feet below the general level of the country, which is here characterized by barren hills, arranged in roughly parallel ridges, running north-and-south. Labrador Peninsula—*Cont.*

"The country beyond the main river-valley, as seen along the portage-routes followed, rises above two thousand feet, and is broken by long, rounded ridges of hills that stand from two hundred to five hundred feet above the general level. The lower lands are covered with swamps and dotted with small lakes. The higher ground is often rocky, and everywhere the surface is covered with a great thickness of boulders and broken rock, arranged in irregular ridges, and often without any finer material filling the spaces between them. These ridges form the portage-paths, through the innumerable swamps, but are dangerous and difficult roads for travelling with heavy loads.

"In the river-valley, as far as Lake Mouchalagan, many large trees of white spruce are seen, which would make excellent timber. These trees are most numerous along the first hundred miles from the mouth of the river, and many places were noted, in this distance, where the quantity was sufficient for the establishment of lumber camps. The falls at the mouth of the river would furnish much more power than would be necessary for all milling purposes, and the only drawback to successful working, is the shallow water at the sea coast, where the mouth of the river is greatly obstructed by sandy shoals, extending several miles from shore and affording a very dangerous anchorage outside. Trees.

"Besides white spruce, in the valley, large quantities of black spruce, fit for superior pulp-wood, grow far inland, together with balsam fir, Banksian pine, larch, aspen, balsam, poplar and white birch; all of which grow to a fair size, for upwards of two hundred miles inland. Below the first forks, or for about fifty miles from the coast, occasional trees of white pine are seen on the rocky sides of the valley, while on the bottom-lands yellow birch and black ash are found in small quantities. The growth of these trees shows that the climate of the lower river-valley is sufficiently moderate for the cultivation of hardy crops, thus affording a considerable area for future settlement. On the uplands of the interior, the country is only partly wooded with small growths of black spruce, larch, and, in places, Banksian pine; these trees rarely exceed eight inches in diameter, and, branching out close to the ground, are unfit for commercial purposes. All the higher hills rise above the tree-line, and as the central watershed is approached, Arable land.

Labrador Peninsula—*Cont.*

more than half the country is barren. From the above description it will be seen, that much, or all of this high interior region, is unfitted for agriculture.

Laurentian rocks.

"Rocks, of Archæan age alone, were met with along the various routes followed. On the river below Lake Mouchalagan, they belong to the Laurentian, and are largely mica granite-gneiss, often garnetiferous, together with hornblende granite-gneiss, and anorthosite. In these rocks there are few indications of metalliferous veins or minerals of economic value. About Lake Mouchalagan, the garnetiferous gneisses predominate, and appear to be associated with thin bands of crystalline limestone.

Crystalline limestones.

"Above the lake, for some thirty miles, these crystalline limestones are developed in great thickness, and are associated with mica-schists, and garnetiferous gneiss. The limestone is often pure, and at times contains tremolite, or mica, of which latter no large crystals, however, were seen. The mica-schists, close to the limestones, often contain large quantities of graphite, and at other times pyrites, or magnetite.

Great band of iron-ore.

There is an extraordinary band of iron-ore, which appears to belong to the beds associated with the limestone. The ore occurs in a gneiss, composed of quartz, felspar and magnetite; and according to the proportion of magnetite present, grades from ferruginous gneiss into an almost pure iron-ore of high grade. This band was seen in places ten miles apart, on the portage-route leading from the river towards Lake Matonipi, on the Outardes River, and in one place had a thickness of over two hundred feet. Numerous scattered blocks in the river valley, below the portage-route, point to an extension of the band to that place; while to the westward, and twenty-five miles beyond where last seen by us, the guide said that the mass of the 'shining mountain' is composed of similar ore. This mountain is referred to in the *Relations des Jésuites* as a burning mountain, and acquires its title from the glistening of the ore-faces in the sun, when they present a most dazzling appearance. From the above it will be seen, that this bed, in great thickness, can be traced along the strike of the rocks for upwards of thirty miles, forming one of the greatest known deposits of iron-ore.

Schists with quartz-veins.

"To the northward of the portage-route, the rocks along the main stream consist of an apparently bedded series of mica-schists, together with hornblende-schists, and decomposed, massive, basic eruptives; the whole cut by large masses of garnetiferous, mica-hornblende granite-gneiss. The schists are full of quartz-veins, often holding a good deal of pyrites. They may yet be found to contain gold, as they somewhat

resemble the Huronian rocks of localities where gold is now known to occur. Labrador Peninsula—*Cont.*

"As Summit Lake is approached, the schists give place to a coarse, hornblende-granite, which extends westward to Nichicun, and is apparently a south-eastern extension of the great area of similar rock, previously met with between the East Main and Ungava rivers."

Nova Scotia.

From the date of the last Summary Report, part of the winter of 1894-95 was spent by Mr. Fletcher in plotting his surveys, in revising those made by his assistants in the district described on pages 91-94 of that report, in correcting proofs of Nos. 35 and 36 of the Nova Scotian series of maps, in colouring geologically sheets photographed by Mr. Topley from the manuscript maps, in reducing, tracing and adding supplementary surveys to these sheets, in studying Sir Wm. Logan's notes and plottings of the Pictou coal-field and in compiling plans by the late Mr. Scott Barlow of part of Cumberland county and cataloguing and arranging others. The greater part of his time was, however, occupied in compiling from these surveys and other sources, maps of Cumberland county from Moose River and Five Islands towards Cape Chignecto and the Joggins and Springhill coal-fields on a scale of 1 mile to an inch, and of Hants county between the Shubenacadie and Avon Rivers, on a scale of half a mile to an inch. The latter still remains to be reduced to one mile to one inch for publication. Surveys of the Nictaux and Torbrook iron mines in Annapolis county and of the North River and Truro Devonian rocks in Colchester county were also compiled. Work by Mr. Fletcher.

He left Ottawa on June 10th, 1895, to resume field-work in Nova Scotia, with the particular object of obtaining the information necessary for new editions of the Glace Bay, Sydney and New Campbellton map-sheets in the Sydney coal-field, the revision of which it is desirable to make as thorough and complete as possible by adding geological and geographical detail to the original maps. The greater part of the season has, consequently, been spent by Mr. Fletcher in Cape Breton; but before beginning work there he reëxamined (June 14-21) localities in Antigonish and Pictou counties where he hoped to find fossils in the rocks classed as Cambro-Silurian, in the quartz-veins of which at Sutherland River a discovery of gold has recently been reported. This examination was continued (October 6-18), in company with Dr. H. M. Ami, who was collecting fossils to assist in determining certain doubtful points of structure. Silurian fossils were found in small Revision of Sydney coal-field.

Nova Scotia—*Cont.* Investigations in Pictou county.

patches of greatly altered rock previously supposed to be Cambro-Silurian at Dunbar's, Sunnybrae (Report for 1886, part P, p. 32) and Glencoe Brook, while a *Streptelasma*, like that from the Silurian of Beechhill Cove, was subsequently found, near the post-office on Brown's Mountain, in a small outcrop of rocks also previously included with the Cambro-Silurian but which do not resemble those of the typical exposures of that series.

From November 15th, Mr. Fletcher was again in Pictou county, where he obtained a copy of Mr. Poole's geological plan of the coal-field, made a few supplementary surveys in that vicinity and, with the kind coöperation of Mr. F. H. Chambers of Bridegville and Messrs. J. D. Fraser and O. Herting of Ferrona, collected a quantity of specular iron-ore to send to Ottawa for use in collections. Work is being vigorously prosecuted at the iron mines on the East River of Pictou. A new quarry of dark bituminous limestone has been opened at Springville. At the old Blackrock quarry, a cave was examined, along the floor of which runs a stream of water, the roof being hung with rough stalactites.

A spring of strongly saline water, not before mentioned, was also visited at Dunmaglass on Knoydart Brook, a quarter of a mile northwest from the road to Eigg Mountain.

Surveys made.

Respecting the work done in Cape Breton, Mr. Fletcher reports as follows:—"My field assistants were M. H. McLeod and T. S. McLean who were employed for more than four months and surveyed brooks, lakes and roads, principally in the region underlaid by rocks of the Millstone grit, between Mira Bay and Sydney Harbour, near North Sydney and on Boularderie Island. Their work was greatly facilitated by the use of a large map now being constructed for the Dominion Coal Company by Mr. Hiram Donkin, C. E., and his assistants, kindly lent by the manager, Mr. McKeen, M. P., which shows the new lines of road and railway together with chained surveys of most of the sea-coast, lakes and large streams.

"In this district, in the absence of rock-outcrops and pits, useful geological work can be done by tracing certain bands of coherent rock by means of blocks which lie unweathered on the surface, the loose rocks on the surface being for the most part, as was long ago pointed out by Mr. Robb, derived from beds immediately underlying. In some cases, confirmation of results obtained by this method was obtained in pits subsequently sunk.

Hub seam.

"The outcrops and water-levels of the coal-seams in the productive measures, were for the most part well defined before 1874, although

the progress of mining admits of their being now delineated with greater precision than on the map of that date. On the Hub seam (Report for 1872-73, p. 260), which has lain idle for twenty years, work has been resumed in an attempt to win the coal from the submarine area. It was found that while wood submerged for that period in the pit-water has remained sound and well preserved, the iron of rails and castings of all kinds has been completely eaten away, a light, porous skeleton, composed of carbon, silica, iron oxides, &c., being left. Wrought iron is also greatly wasted, but steel points have remained unchanged. Nova Scotia—*Cont.*

"At the western workings of the Gowrie mine, a north-and-south fault was met, which threw the coal down thirty-six feet on the west side. From its face, at the level of the shaft-bottom, a stone drift was extended 284 feet, and borings were made to the coal from this drift and also from the surface along the shores of Morrison Lake, which prove that the Martin pit is on the McAulay seam, as indicated on Lyman's map; but which, taken in connection with the underground workings, also proves that, west of the fault, the axis of the basin is deflected further to the north, and that this seam, instead of terminating, probably continues for more than a mile past the Martin pit, in a narrow basin, to the outcrop of the seam, eight to twelve feet thick, discovered by Neville (Report for 1874-75, p. 189). The discrepancy in the size of the two seams is accounted for by the fact that at certain points on the north rise at the Gowrie mine, the coal attains a thickness of eleven feet, though nominally only five. That the Long Beach anticline or fault (Report for 1874-75, pp. 205 and 212) passes the old Louisbourg railway, was proved by a line of pits sunk in 1891 by Mr. E. T. Moseley, in search of the westward extension of the large seam above mentioned, the steep southerly dips and of the bottom of the Cow Bay basin, being found also nearly to the fork of the Hines and Cow Bay roads. Gowrie mine.

"On the investigation of the lower coal-seams of the Millstone grit, much money has been spent during the last twenty years, in the hope of their proving economically available, and the acquisition by the Dominion Coal Company of nearly all the mining areas of known value east of Sydney Harbour has stimulated prospecting, yet the results have not generally been encouraging, the coal-seams found seldom exceeding three feet in thickness, and being usually much less. One of the areas, on the Morrison road, visited in 1894 in company with Dr. Gilpin, the Inspector of Mines, and the Deputy Inspector, is shown by the former, in the last number of the Transactions of the Nova Scotian Institute of Science, to contain no seams of more than two feet in Search for lower coal-seams.

Nova Scotia—*Cont.*

thickness, and subsequent close examination has not disproved this statement. It is on the line of the Tracy seam and the little seams that accompany it, as given in Mr. Robb's sections and map (Reports for 1874-75, p. 189 ; 1875-76, p. 414).

"Mr. Lewis Stephens and others have continued to search for workable coal on the strike of these seams on the Mira and Morrison roads near Black Brook, but appear to have found none. From one of the seams a few inches of excellent cannel was obtained. Nearer Sydney, prospecting has been carried on intermittently at the Cossitt pits, but with only the disappointing results explained by Mr. Robb (Report for 1874-75, p. 191). The red rocks of Mira Bay extend nearly to these pits before being replaced by the gray strata of Sydney Harbour.

Tracy seam.

"Since 1874 the Tracy mine has not been worked to any extent. An attempt made, some years ago, to cut through False Bay beach and make of False Bay Lake a suitable port of shipment, was, like a similar effort more recently made to convert McIsaac Pond at Broad Cove into a ship harbour, frustrated by the closing of the excavation by the sea.

"Explorations made by Mr. Simon E. Landry and his associates on the supposed extension of the Tracy seam west of False Bay Lake, have cut two little seams apparently overlying it (Report for 1874-75, pp. 177 and 188) near the Back-lands road. Their explorations have been greatly impeded, however, by a great quantity of surface deposits.

"In a pit sunk near the North-west Brook of Bridgeport Basin, at the most southerly of those called 'Macdougall's pits' on the map of 1874, a coal-seam, with a low southerly dip, generally supposed to be the Carroll, has the following section :—

	Ft.	In.
Top coal	2	6
Shale or clay	0	6
Coal	2	0
Clay	0	3
Coal, not well seen	1	9
	7	0

"In other pits of the immediate neighbourhood, however, it is not so thick. These pits are probably, as stated by Mr. Robb (Report for 1874-75, p. 194), on the crown of the anticline, on the north side of which are those at the mouth of the North-west Brook, supposed to be on the same seam. In one opened by the Messrs. Routledge, the dip is N . 6°, and the section is as follows :—

	Ft.	In.
Top coal	1	3
Clay	0	2
Coal	1	9
Parting	..	..
Coal	0	11
	4	1

"In other adjoining pits, dug by Messrs. Neville and McVey, the coal is said to be four feet four inches thick. The anticline apparently lies a little south of these pits, but its exact position is still uncertain.

Carroll seam.

"Although the Carroll seam has not yet been positively traced into the Glace Bay basin—unless it be the small pyritous seam known as the Buchanan seam (Report for 1874-75, p. 190, on which several new openings were made last season—a thorough and systematic search for it was begun last August by Mr. E. T. Moseley, Q.C., and Mr. D. J. Kennelly, formerly manager of the Reserve mines, by means of a series of diamond-drill borings and pits along the old Louisbourg railway. These explorations have tested the strata underlying the Lorway seam far to the south of the crossing of the Hines road, and have discovered a seam of coal, eighteen inches thick, at a little brook three-quarters of a mile north of the Hines road, and another of about the same thickness at that road. The first is, perhaps, the equivalent of a seam, twenty-one inches thick, opened on the south side of Cow Bay basin, in a pit about one mile north-east of the post-office at Cochran's Lake. The average dip north of the Hines road has been shown by these borings to be about one in twelve. It is hoped that a workable seam may yet be found underlying. Apparently near the same horizon, also near the Cow Bay anticline, good exposures including a one-inch seam of coal, have been made on the new Louisbourg railway at the crossing of Sand-lake Brook. They consist chiefly of red and green marly rocks and of bluish-gray shales full of impressions of fossil ferns and other plants, the dip being about N. 6° E. < 5°.

District west of Sydney Harbour.

"Little need at present be said of the district west of Sydney Harbour. From the Sydney mines, there is the usual large annual output of coal. On the crop of the Indian Cove seam, a small mine has been opened by Mr. Greener, and a quantity of coal shipped over a short railway to a wharf built in the cove. The shipment of coal from the Cape Breton colliery at New Campbelton, has been affected by the closing of St. Peter's canal for repairs. An adit, driven to the shore at sea-level, now drains the upper workings. The owners, Messrs. Burchell Brothers, have, during the last few months, bored with the diamond drill some twelve or fifteen hundred feet of strata, in various

Nova Scotia—*Cont.*

holes, for the purpose of finding the large seams which lie above and below the equivalent of their main seam in other parts of the field, but which here seem to be scarcely workable. Sections have been made of the borings here as well as on the old Louisbourg railway, which are useful as proving the strata and for comparison with the sections in Mr. Robb's report.

Dolomites used as flux.

"The bed of white, massive, gray-weathering, broadly-crystalline dolomite discovered in the crystalline limestone series by Mr. Robb and analysed by Dr. Hoffmann (Reports for 1873-74, p. 174 ; 1874-75, p. 253), has been to some extent utilized by the Messrs. Burchell, who are shipping sixteen hundred tons for the use of the steel works at Trenton, and are building a short branch from their coal-mines railway to the foot of the mountain at the North Brook, where it occurs in great cliffs. Analyses of this dolomite and of others from similar rocks at George River and Marble Mountain, obtained from Mr. J. D. Fraser, manager of the iron-works at Ferrona, are appended for comparison with that made by Dr. Hoffmann.

Analyses.

	I.	II.	III.	IV.
Silica	1·41	0·73	2·58	2·00
Oxides of iron and alumina	1·92	1·55		0·50
Calcium carbonate	50 19	54·83	88·67	77·47
Magnesium carbonate	42·16	42·95	7·89	20·00
Phosphate of lime		None.		
Sulphate of lime		None.		

I. and II. give the average of a number of samples from the North Brook, tested by different analysts, the first at Ferrona laboratory by Mr. Fraser, the second at Pittsburg. III. is the average of twelve analyses made by Mr. O. Herting at Ferrona, from samples collected at Marble Mountain ; IV., the mean of a large number of pieces taken from different beds in George River district, between Crane Brook and the limestone quarries near the mouth of the river.

Other minerals.

"From the crystalline limestone formation at George River, specimens of chalcocite and chrysotile have been sent to the Geological Survey by Mr. Hugh R. MacKenzie, C.E., of Sydney. Attempts have also been made to work the traces of iron-ore found in this district, but without success.

"No use has yet been made of the fire-clay of Coxheath (Reports for 1873-74, p. 173 ; 1875-76, p. 373 ; 1876-77, p. 456) 'suitable for the manufacture of fire-bricks and pottery,' and rendered more accessible by the completion of the Intercolonial railway to Sydney, from the line of which the deposit is distant about three miles.

"A diamond drill is at present at work in a search for coal on the eastern shore of Sydney Harbour, three-quarters of a mile north of Beatty Brook, where, of course, it will cut only the Carboniferous

limestone rocks of the section given in the Report for 1874-75, page 169, and infallibly result in disappointment. In Pictou county, also, money has been uselessly spent during the past few weeks in sinking among the red rocks of the Foxbrook road, which underlie the productive measures, and also among the rocks of the East River below New Glasgow, which overlie them." Nova Scotia—*Cont.*

Mr. E. R. Faribault's office work, since the date of the last Summary Report, has continued to be in connection with the compilation and completion for publication of the results of his surveys in the gold-bearing regions of Nova Scotia. The manuscripts for the nine sheets numbered 39, 40, 41, 42, 48, 49, 50, 51 and 52 have been completed. They cover the area extending along the Atlantic coast from Salmon River to Musquodoboit Harbour, and inland to the Pictou and Stewiacke valleys, and are included in the counties of Halifax, Colchester and Pictou. Structural sections for sheets 39 and 40 have also been made, but similar sections for the remaining seven sheets have still to be prepared. Work by Mr. Faribault.

In addition to the regular map-sheets, on a scale of a mile to the inch, special plans have also been plotted, on a scale of 500 feet to one inch, of the gold-mining districts of Tangier, Mooseland, Moose River, Caribou, Oldham, Montague and Waverley. Some of these plans are not quite completed, and sections still require to be prepared before they will be ready for publication. They are on a sufficiently large scale to show the interesting and important relation of the auriferous quartz-veins to the general structure of the anticlinal folds, with the numerous faults and disturbances affecting them. It is also intended to show upon these plans, the quartz-veins known to occur in the districts, their width and length, the extent to which they have been worked in depth and along their cropping, together with their average richness when this can be ascertained, the direction and dip of pay-streak and that of the anticlinal axes. Special plans.

Mr. Faribault's field-work was in continuation of that accomplished in previous years. His progress report upon it is as follows:—"I left Ottawa on May 30th to resume field-work in Nova Scotia, and continue the mapping and study of the structural geology of the gold-bearing rocks of the Atlantic coast, and to complete as far as possible the surveys required for the sheets numbered 53, 54, 55, 56, 66, 67, and 68. Owing to the limited amount of exploration fund at my disposal, field operations had to be discontinued by the end of August, and consequently the Waverley sheet numbered 67 and the Halifax City sheet numbered 68 have not been completed. Field of operations.

Nova Scotia—*Cont.*

Positions and names of map-sheets.

"The five sheets just enumerated, comprise the gold-bearing region of the central part of the province, extending along the Atlantic coast from Musquodoboit Harbour to Halifax Harbour, and inland to the northern boundary of the gold-bearing rocks, where they are overlaid by Carboniferous strata along the St. Andrews River, the Shubenacadie River, the Nine-mile River, and on the north side of the Rawdon Mountains. Each sheet covers an area of 12 miles by 18 miles, and the five sheets thus cover 1080 square miles and include portions of the counties of Halifax, Colchester, and Hants. Each sheet is well designated by the name of the most important place it contains, which are the following:

No. 53, Lawrencetown sheet,
" 54, Preston sheet,
" 55, Middle Musquodoboit sheet,
" 56, Stewiacke sheet,
" 66, Rawdon sheet.

"The rocks of the region examined have been forced into a series of folds, almost parallel to each other, bearing a general easterly or westerly course. As many as fifteen folds were located across the belt of forty miles of gold-bearing rocks, extending from the Atlantic coast to their northern limits on the north side of the Rawdon Mountain. The structure of these plications was carefully studied and the anticlinal axes were traced and worked out with as much accuracy as possible, on account of the importance of these axes in regard to gold occurrence.

Enumeration of anticlines.

"The names given provisionally to the fifteen anticlines, in the order of their occurrence from the shore to the Rawdon Mountain, with notes on the gold mines worked and quartz-veins prospected along their course, are as follows:—

"1. *Three-fathom Harbour Anticline.*—Crosses only some outlying points along the Atlantic coast.

"2. *Lake Catcha Anticline.*—Worked extensively on two or three properties at Lake Catcha gold district, and a few auriferous quartz-veins have been prospected along its course east of Oyster Ponds.

"3. *De Said Lake Anticline.*—A few auriferous quartz-veins have been prospected on this axis in the vicinity of De Said Lake.

"4. *Lawrencetown Anticline.*—Important operations have been prosecuted on two or three properties at various times at Lawrencetown gold district, and a few auriferous quartz-veins have been opened up at Upper Chezzekook.

"5. *Porter's Lake Anticline.*—Promising auriferous quartz-veins have been prospected along this anticline on the east side of Porter's Lake, one mile north of the telegraph road.

"6. *Montague Anticline.*—Half a dozen properties have been extensively worked at various times for a number of years in Montague gold district. Very promising quartz-veins have been prospected east of Lake Major, where one of the main faults of the region has shoved the anticlinal axis on the west side of the lake, nearly one mile and a half to the north of its normal position. A few quartz-veins have also been tested along this line east of Bedford Basin.

"7. *Waverley Anticline.*—Extensive mining operations have been carried out on one or other of the many properties of the Waverley gold district, almost continuously since its discovery, to depths of over 400 feet. Auriferous quartz-veins were also prospected on this anticline in the vicinity of Karney Lake and south of Goff post-office.

"8. *Caribou Anticline.*—This only brings up the upper black slate group. Quartz-veins have been prospected along its course on Lively Brook, and north of Goff post-office.

"9. *Oldham Anticline.*—The extensive gold mining district of Oldham has been considerably worked since its opening, two or more shafts on an incline of 43°, reaching a depth of 574 feet, on the Dunbrack lead, while some of the leads have been worked, or opened up, for over one mile in length along their course.

"10. *Carroll's Corner Anticline.*—Auriferous quartz-veins have been opened up at Key's Brook and at the Horn settlement.

"11. *South Uniacke Anticline.*—A few quartz-veins are being worked very successfully at the south Uniacke gold mines, to depths of 500 feet, on some very rich and persistent pay-streaks.

"12. *Mount Uniacke and Renfrew Anticline.*—Mining operations have been prosecuted extensively in both gold districts of Renfrew and Mount Uniacke, for a number of years.

"13. *East Rawdon Anticline.*—Considerable mining work has been done in the East Rawdon gold district for some years.

"14. *Rawdon Mountain Anticline.*—A minor anticline in the slate, between the two main synclines of the upper black slate belt of the Rawdon Mountain. Exploratory work has been done recently at the Withrow gold mine, and numerous quartz-veins have been tested on the surface, along this axis, but most of them proved to be barren.

Nova Scotia—*Cont.*

"15. *Gore Anticline.*—Crops out only in a few places along the southern boundary of the Carboniferous rocks of the Kennetcook basin, by which it is mostly covered.

Faults.

"A number of faults, bearing a general north-and-south course, cut the stratification at right angles, and time was taken up in tracing these and working out the magnitude of the displacements. Some of them cut the whole width of the gold-bearing belt from the Atlantic coast to the Carboniferous boundary on the north side of the Rawdon Mountain, a distance of forty miles, with horizontal displacements sometimes as great as one mile and a half.

Detailed surveys.

"During the summer, special detailed surveys were also made of the gold-mining districts of Lake Catcha, Lawrencetown, Renfrew, East Rawdon, Withrow and Central Rawdon, and necessary data taken in the field, in order to prepare plans of these districts, like those already made of the eastern part of the province, on a scale of 500 feet to one inch.

"A topographical survey of the gold-field of Nova Scotia was undertaken jointly by the Geological Survey and the Nova Scotian government in 1881, and W. Bell Dawson, C. E., was entrusted with the work, and made a most accurate map, on a scale of two inches to one mile, representing an area of twelve miles by eighteen miles, including the city of Halifax and its vicinity. He also made a special plan of each of the gold districts of Lawrencetown, Montague and Waverley on a scale of 500 feet to one inch. These topographical surveys were intended to become the basis of a geological map, but were not prosecuted further, the arrangement under which they were undertaken having fallen through. The area covered by the above plans is partly included in the south-western portion of the region surveyed last summer, they were found most useful in the field in working out readily the structure of the rocks and will be a great help in compiling the map of that area.

"I was again ably assisted in the field during the season by Messrs. Archibald Cameron and Jas McG. Cruickshank, who have been my assistants for the last twelve and eleven summers respectively. They were also employed another month plotting their summer's work. Mr. Frank D. Phinney was also one month with me last summer."

Work by Prof. Bailey.

In the Annual Report for 1892-93 (Vol. IV.), a preliminary report, on the Geology of South-western Nova Scotia by Professor L. W. Bailey is printed. The relation of this to a more detailed report by

the author is there stated. It was not found possible to arrange for any lengthened period of field-work in this connection during the past summer, but Professor Bailey having volunteered his services for a portion of the season, about a month was spent upon the work by him. Of the observations made, he writes as follows :— Nova Scotia—*Cont.*

"These observations had, as their primary object, the obtaining of data required to complete a report upon the geology of Yarmouth and Digby counties, materials for which had already been partially obtained in the summers of 1892 and 1893, by the examination of certain sections not at that time visited, and the reëxamination of others. The results relate, therefore, mostly, to minor details of structure. In particular, a minute examination was made of considerable portion of the micaceous and hornblendic belt which stretches inland, along the line of the Dominion Atlantic railway, from the city of Yarmouth to the border of Digby county; and secondly of the section of Cambrian rocks lying between the head of St Mary's Bay and the Grand Joggins on the Annapolis Basin. Objects in view.

"Both examinations fully confirmed the conclusions previously stated in my preliminary report published last year. As regards the former belt, both the sequence and the characteristics of the rocks composing it, and which had at one time been supposed to be of pre-Cambrian (Huronian) age, were, as seen particularly in the vicinity of Brazil Lake, Lake Ausier and Lake George, found to bear the closest resemblance to the rocks exhibited at Jordan Falls and about Shelburne Harbour, in the county of Shelburne, both being clearly of Cambrian age. The rocks of the second section above referred to, which are in character and sequence typical of a large part of Digby county, are as certainly also a portion of the same Cambrian system. This being the case, it had been hoped that from the black slates which here, as in Queen's county, form the upper member of the system, organic remains might be obtained which would place the age of the containing beds beyond all question; but the search for these, though prolonged, proved unavailing. Results.

"It was also hoped that some further light might be thrown upon the doubtful relations of the peculiar beds about Cape St. Mary, to those of the fossiliferous Silurian and Devonian belt previously recognized at Bear River and Mistake settlement; but upon this point also, little of a definite character could be ascertained, the frequent interposition of areas of eruptive rocks, together with accompanying metamorphism, making it very difficult to follow or to recognize the identity of beds, more particularly when separated, as those of Digby county

Nova Scotia—*Cont.*

so frequently are, by wide intervals of drift. Many features of resemblance have been noted between the beds of Cape Cove, near Cape St. Mary, in Yarmouth county, and those of the tract bordering Annapolis Basin between Bear River and the Grand Joggins, but it would still be unsafe, from present data, to assert their identity or to fix their age.

"In addition to the observations on the Cambrian system, referred to above, some time was devoted to a further study of the traps and sandstones of Digby Neck, including the iron deposits of Waterford, etc. Native copper in threads and small nodules was observed near the entrance of Digby Neck, but the quantity was small. No other minerals of economic value were noted."

Chemistry and Mineralogy.

Chemistry and mineralogy.

Reporting on the work of this division, Dr. Hoffmann says:—"The work in the chemical laboratory during the past year has been carried out upon the same lines as those heretofore followed, that is to ay, it has been chiefly confined to the examination and analysis of such minerals, etc., etc., as were considered likely to prove of economic value and importance. The ground covered included:—

Analyses.

"1. Analyses of fuels.

"2. Analyses of mineral and other waters and brines.

"3. Analyses of iron-ores.

"4. Analyses of certain ores in regard to nickel content.

"5. Analyses of marls.

"6. Assays, for gold and silver, of ores from the provinces of Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia.

"7. Examination, and in some instances complete analysis, of several minerals not previously identified as occurring in Canada, some of which promise to prove of economic importance.

"8. Miscellaneous examinations. These include the examination and testing of brick and pottery clays; of limestones and other materials, supposed to possess hydraulic properties; of some samples of silt, bog manganese and disseminated graphite, and of other materials not included under the above headings.

Mineral specimens examined.

"During the period in question, five hundred and seventy-three mineral specimens were received for the purpose of identification or the obtaining of information in regard to their economic value. The greater number of these were brought by visitors, and the information

sought in regard to them was not infrequently communicated to them at the time of their calling. In other instances—those where a more than mere cursory examination was called for, or a partial or even complete analysis was deemed desirable, as also in the case of those specimens which had been sent from a distance—the results were communicated by mail. The number of letters written, chiefly in this connection, and generally of the nature of reports, amounted to two hundred and fourteen, and the number of those received to eighty-nine. Chemistry and mineralogy—*Cont.*

"Messrs. R. A. A. Johnston and F. G. Wait, assistants in the laboratory, have both applied themselves diligently to the work in hand, and rendered excellent service. The former has, in addition to the carrying out of a lengthy series of gold and silver assays, also made some important analyses of minerals, and likewise conducted a great variety of miscellaneous examinations; whilst the latter has, as a principal work, been engaged in the analysis of mineral and other waters, marls and iron-ores. Work by assistants.

"In the work connected with the mineralogical section of the museum, I have been ably assisted by Mr. R. L. Broadbent. He has, apart from general museum work, including the maintenance of the collection generally in an orderly condition, been engaged in the permanent labelling of specimens—a work which must of necessity be of a more or less continuous character by reason of frequent additions to the collection; and also prepared the manuscript of over eight hundred labels for the collections illustrating the distribution of iron, copper, lead, antimony and other ores.

"The additions to the museum amounted to one hundred and thirty specimens. Some of these consisted of minerals not previously represented in the collection, the greater number, however, were of minerals already contained in it, but from new localities, and serve to illustrate their distribution. Contributions to museum.

"Amongst the additions just referred to, are the following, of which—

"*(A.)* Were collected by officers on the staff of the Survey:—

Ami, Dr. H. M.:—

Crystals of pyrite from Willards Mill, Castle Brook, west shore of Lake Memphremagog, Brome county, Q.

Barlow, A. E.:—

Cyanite from Snake Creek, (ten miles north of Mattawa) Pontiac county, Q.

Contributions to museum—*Cont.*

Bell, Dr. R.:—

Chalcocite from the Borron location, tp. of Gould, district of Algoma, O.

Chalmers, R.:—

a. Pre-Glacial or Pleiocene clay from the mouth of Rivière du Loup, Beauce county, Q.

b. Auriferous quartz from the Harrison gold mine, lot 1, range VI., Westbury, Compton county, Q.

c. Rock specimens from lot 4, range IV., Dudswell, Wolfe county, Q.

d. Rock specimen from same locality as *b*.

e. Quartz showing native gold from same locality as *b*.

f. Rock specimens from Falls of Bras River, Beauce county, Q.

g. Scheelite, eight specimens from lot 1, range VII., Marlow, Beauce county, Q.

h. Twelve specimens illustrating mineral associations of scheelite from lot 1, range VII. of Marlow, Beauce county, Q.

i. Auriferous quartz from lot 2, range I., Linière, Beauce county, Q.

Dawson, Dr. G. M.:—

a. Chabazite from road at head of Chasm, north of Clinton, B.C.

b. Shale conglomerate constituting bed rock at the Horsefly mine, carrying gold, Cariboo district, B.C.

c. Bornite from the Tenderfoot claim, east side of Copper Creek, Kamloops Lake, B.C.

d. Gypsum occurring in concretionary or nodular masses in 'china-stone' deposit on west side of Fraser River, opp. Spatsum Station, Canadian Pacific Railway, B.C.

e. Cinnabar from Last Chance No. 2 claim, east side of Copper Creek, Kamloops Lake, B.C.

f. Molybdenite from same locality as the preceding.

g. Native copper in serpentine from 'Painted Bluffs,' near Copper Creek, Kamloops Lake, B.C.

h. Cinnabar from Six-mile Point, Kamloops Lake, B.C.

i. Silver ore, five specimens from the Homestake claim, near Adams Lake, B.C.

j. Magnetite from the Glen iron mine, Cherry Bluff, Kamloops Lake, B.C.

k. Selenite from Fort Kipp, Old Man River, district of Alberta, N.W.T.

l. Limestone showing cone-in-cone structure, from Athabasca Landing, district of Alberta, N.W.T.

Contributions to museum—*Cont.*

m. Coal from Holloway's Spring Creek mine, Middle Fork of Old Man River, district of Alberta, N.W.T.

n. Coal from Highwood River, district of Alberta, N.W.T.

o. Auriferous quartz from the Sultana, Winnipeg Consolidated and Gold Hill mines, Lake of the Woods, district of Rainy River, O.

Ells, Dr. R. W.:—

Magnetite from lot 16, con. IX., Bagot, Renfrew county, O.

Faribault, E. R.:—

Stibnite and kermesite, six specimens from West Gore, Hants county, N. S.

Ferrier, W. F.:—

a. Quartz showing native gold from the Ledyard Gold Mines, Belmont, Peterborough county, O.

b. Arsenopyrite from the Gatling mine, Marmora, Hastings county, O.

c. Bismuthinite from lot 34, con. III., Tudor, Hastings county, O.

d. Epidote from lot 8, con. XIX., Tudor, Hastings county, O.

Fletcher, H.:—

a. Hæmatite from Doctor's Brook iron mine, Arisaig, Antigonish county, N. S.

b. Manganite from Morley road, Cape Breton county, N.S.

c. Talc from Kennington Cove, Cape Breton county, N.S.

Giroux, N. J.:—

Allanite from east shore of Lac à Baude (Lake Bouchard), Champlain county, Q.

Ingall, E. D.:—

Crystals of galena from Gold Hill claim, Illecillewaet mines, West Kootanie district, B. C.

Low, A. P.:—

Almandite crystals from mica-schist from Manicuagan River, Saguenay county, Q.

McConnell, R. G.:—

a. Galena, zinc blende and tetrahedrite from the Antelope claim, Slocan mining district, West Kootanie, B.C.

b. Zinc blende with pyrite from the Bluebird mine, Slocan mining district, West Kootanie, B.C.

Contributions to museum—*Cont.*

c. Galena coated with earthy carbonate of lead from the Deadman mine, Slocan mining district, West Kootanie, B. C.

d. Galena from the Reco mine, Slocan mining district, West Kootanie, B.C.

e. Galena with cerussite, from the Reco mine, Slocan mining district, West Kootanie, B.C.

f. A mixture of earthy sulphate and carbonate of lead with quartz, from the Reco mine, Slocan mining district, West Kootanie, B.C.

g. Galena, pyrite, chalcopyrite, and a little mispickel from the Sheep Creek Star claim, Sheep Creek, Trail Creek mining district, West Kootanie, B.C.

h. Quartz with galena, pyrite and chalcopyrite, from the O. K. mine, Sheep Creek, Trail Creek mining district, West Kootanie, B.C.

i. Quartz with pyrite from the Gold Hill claim, Trail Creek mining district, West Kootanie, B.C.

j. Pyrrhotite with chalcopyrite (auriferous and argentiferous) four specimens from the Leroy mine, Trail Creek mining district, West Kootanie, B.C.

k. Pyrrhotite with chalcopyrite from the Great Western claim, Trail Creek mining district, West Kootanie, B.C.

l. Iron pyrites, pyrrhotite and zinc blende, from the Lilly May claim, Trail Creek mining district, West Kootanie, B.C.

m. Iron pyrites, galena and zinc blende from the Lilly May claim, Trail Creek mining district, West Kootanie, B.C.

n. Pyrrhotite with chalcopyrite (auriferous and argentiferous) from the Kootanie claim, Trail Creek mining district, West Kootanie, B.C.

o. Mispickel from the same locality as the preceding.

p. Pyrrhotite with chalcopyrite from the Iron Colt claim, Trail Creek mining district, West Kootanie, B.C.

q. Pyrrhotite with chalcopyrite (auriferous and argentiferous) from the Nickel Plate mine, Trail Creek mining district, West Kootanie, B.C.

r. Pyrrhotite with chalcopyrite (auriferous and argentiferous) from the War Eagle mine, Trail Creek mining district, West Kootanie, B.C.

s. Pyrrhotite with chalcopyrite (auriferous and argentiferous) from the Monte Christo mine, Trail Creek mining district, West Kootanie, B.C.

t. Pyrrhotite with chalcopyrite (auriferous and argentiferous) from the Cliff mine, Trail Creek mining district, West Kootanie, B.C. Contributions to museum—*Cont.*

u. Mispickel with chalcopyrite and pyrrhotite from the Josie claim, Trail Creek mining district, West Kootanie, B. C.

v. Galena, coated and intermixed with carbonate of lead, ferric hydrate and green carbonate of copper, from the Noble Five claim, Slocan mining district, West Kootanie, B.C.

Tyrrell, J. B. :—

Marcasite from the bank of the Assiniboine River, Manitoba.

"(B.) Were received as presentations :—

Abrahamson Brothers, Revelstoke, B.C. :—

Asbestus (chrysotile) and serpentine from Trout Lake City, West Kootanie, B. .

Bell, B. T. A., Ottawa, O.

Muscovite from Tête Jaune Câche, Rocky Mountains, B. C.

Brown, C., per C. W. Willimott :—

Phlogopite from Kingsmere, Hull, Ottawa county, Q.

Brunet, J., Montreal, Q.:—

Granite, three specimens polished, from the Laurentian Granite Co.'s quarry, St. Philippe, Argenteuil county, Q.

Butchard, R. P., Owen Sound, O.:—

Marl from Shallow Lake, township of Keppel, Grey county, O.

Campbell, A. M., Perth, O.:—

Calcite from near the east end of Dalhousie Lake, Dalhousie, Lanark county, O.

Carter, Alfred, Wairau, Blenheim, New Zealand :—

a. Sample of briquettes or tiles composed of magnetite (separated from Taranaki iron sand by Carter and Purser's process) and glue.

b. Sample of ingot-iron smelted, in cupola furnace, from briquettes similar to '*a.*'

c. Cog-wheel cast from ingot iron, similar to '*b.*'

d. Borings from cog-wheel '*c.*'

Chambers, F. H. (Bridgeville, N.S.), New Glasgow Iron, Coal and Railway Co., Limited, Ferrona, Pictou county, N.S.

a. Limonite from Bridgeville, Pictou county, N.S.

b. Manganite " " " "

c. Barite " " " "

d. Göthite " " " "

Contributions to museum—*Cont.*

Costigan, J. R., Calgary, N.W.T.:—

Zinc blende from South Fork of Red Deer River, district of Alberta, N.W.T.

Coursolles, T. G., Ottawa, O.:—

Phlogopite from lots 16*a* and 17*b*, range VIII., Templeton, Ottawa county, Q.

Ferrier, W. F., Ottawa, O.:—

a. Galena from Tudor, Limerick, Elzevir and Hungerford, Hastings county, O.

b. Galena from Nairn and Galbraith, district of Algoma, O.

c. Quartz with chalcopyrite from Craig's gold mine, Tudor, Hastings county, O.

d. Chalcopyrite from the Begley mine, Batchehwahnung Bay, Lake Superior, O.

e. Chalcopyrite from the township of Snider, district of Algoma, O.

Greenshields, Montreal, Q., per Dr. J. Thorburn:—

Asbestus (chrysotile) from the Jeffrey mine, lot 9, range III., Shipton, Richmond county, Q.

Guillim, J. C.:—

Nine specimens of ores and rocks from the West Kootanie district, B.C.

Hall, G. B., Quebec:—

Microcline from the McGie mine, Block 'G,' Bergeronnes, Saguenay county, Q.

Harding, H.:—

Bituminous shale, so-called 'cannelite,' from Baltimore, Albert county, N. B.

Hill, A. J., New Westminster, B.C.:—

a. Bog-iron ore from Campbell River, lot 14, range VII., New Westminster district, B.C.

b. Slag from burnt seam of coal or lignite, near Village Bay, Mayne Island, Gulf of Georgia, B.C.

Hobson, J. B.:—

Barite in lignite from the Horsefly mine, Horsefly River, Cariboo district, B.C.

Jacques, Captain, Victoria, Vancouver Island, B.C.:—

a. Ilvaite with andradite from Uchucklesit Harbour, near head of Barclay Sound, Vancouver Island, B.C.

b. Ilvaite with pyrite, same locality as above.

c. Chalcopyrite with ilvaite, same locality as above.

Contributions to museum—*Cont.*

Laprairie Pressed Brick and Terra Cotta Co., Laprairie, Q., per J. S. Buchan :—

a. Building brick, grade No. 1, colour 7, four specimens.
b. " " 8, "
c. " " 9, "
d. " " 10, six "
e. 'Buff' brick, four specimens.
f. 'Plastic' brick, six specimens.
g. 'Ornamental' brick, three specimens.
h. 'Paving' brick, six specimens.

Ledyard Gold Mines Company, Limited :—

a. Eleven specimens of auriferous quartz from the east half lot 18, concession I., Belmont, Peterborough county, O.
b. Small bottle of concentrates.
c. " tailings.

Legge, Joshua, Gananoque, O. :—

Steatite from lot 5, concession I., Kaladar, Addington county, O.

McKenzie, H. R., Sydney, N. S. :—

Chalcopyrite from Old French road, Gabarous, Cape Breton county, N. S.

McRae, Hector, Ottawa, O. :—

Graphite from lot 12, concession III., Brougham, Renfrew county, O.

Moffatt, C. P., North Sydney, N.S., per H. Fletcher :—

Chrysotile from George River, Cape Breton county, N.S.

Morris, M., per C. W. Willimott :—

Phlogopite from lot 17, range II., Wakefield, Ottawa county, Q.

O'Connor, M , Delora, O., per Dr. R. Bell :—

Mispickel with lepidomelane from lot 11, concession IX., Marmora, Hastings county, O.

Ontario Peat Fuel Company, Toronto, O., per W. A. Allan :—

Peat fuel from peat bed about five miles from Welland, Welland county, O.

Prest, W. H. :—

a. Thirteen specimens representing the mineral associations of the auriferous quartz from Gold River, Lunenburg county, N. S.
b. Crystals of quartz and pyrites from the Lake lead, Caribou, N.S.

Contributions to museum—*Cont.*

Smith, J. F., Kamloops, B.C.:—

Beryl from Tête Jaune Câche mica deposit, Canoe River, B.C.

Sorette, H., Bridgewater, N.S.:—

Granite, polished specimen from Shelburne, Shelburne county, N.S.

Spotswood, G. A., Kingston, O.:—

a. Petroleum from the Strait of Belle Isle, Newfoundland.

b. Piece of contact rock showing impression of overflow of trap from same locality as the preceding.

c. Sillery sandstone from under the trap, charged with bitumen, from the same locality as the two preceding.

d. Bitumen, anthraxolite (?) from the trap of Port au Port Bay, Newfoundland.

Thain, J. H., Vancouver, B.C.:—

Chalcopyrite and pyrrhotite from Queen's Reach, Jervis Inlet, B.C.

Thompson, H. B., Victoria, B.C.:—

Infusorial earth from south side of Fraser River, opposite Mission City, B.C.

Thorburn, Dr. John, Ottawa, Ont.:—

Asbestus (chrysolite) from the Jeffrey mine, lot 9, range III., Shipton, Richmond County, Que.

Trethewey, T. H., per E. D. Ingall:—

Seven specimens of native copper, two specimens of chalcocite and one specimen of bornite, all from the Copper Creek Mining Company's property (Sand Bay and Pancake Bay locations), Mamainse, Lake Superior O.

Wells and Redpath, Messrs., Kamloops, B.C., per J. McEvoy:—

Asbestus (amphibole) from south side of Tulameen River, nearly opposite Bear Creek, Yale District, B.C.

Weston, T. C., Ottawa, O.:—

a. Nodule of magnetite and hæmatite from one of the Magdalen Islands, Q.

b. Agate from Scaumenac Bay, near Campbellton, Restigouche county, N.B.

Educational collections supplied.

"Mr. C. W. Willimott has, for the most part, been engaged in making up collections of minerals and rocks for various educational institutions. The following is a list of those to which such collections have been sent:—

Educational collections supplied—*Cont.*

1. Huron College, London, Ont.....	consisting of	135	specimens.
2. Public School, Bloomfield street, Halifax, N.S.....	"	90	"
3. Digby Academy, Digby, N.S	"	90	"
4. Richmond School, Halifax, N.S.....	"	90	"
5. Normal School, Fredericton, N.B....	"	135	"
6. Lunenburg Academy, Lunenburg, N.S.	"	90	"
7. Provincial School of Pedagogy, Toronto, Ont.....	"	135	"
8. Collegiate Institute, Winnipeg, Man.	"	135	"
9. Public School, Medicine Hat, N.W.T.	"	90	"
10. Brébœuf School, Ottawa, Ont.....	"	90	"
11. Prince Street School, Charlottetown, P.E.I.....	"	90	"
12. Public School, Nauwigewauk, N.B...	"	90	"
13. County Academy, Guysborough, N.S.	"	90	"
14. Public School, Chipman, N.S.....	"	90	"
15. Acadia College, Wolfville, N.S.....	"	188	"
16. Amherst Academy, Amherst, N.S....	"	90	"
17. Couvent de Jésus Marie, Lévis, Que..	"	90	"
18. High School, Iroquois, Ont.....	"	135	"
19. " " Hopewell Hill, N.B....	"	135	"
20. " " Keswick Ridge, N.B ...	"	135	"
21. Collegiate Institute, London, Ont....	"	135	"
22. Grammar School, Alma, N.B.....	"	135	"
23. Public School, Breslau, Ont.....	"	90	"
24. Acadia Seminary, Wolfville, N.S	"	90	"
25. Public School, Carpe, Ont.....	"	90	"
26. Holy Cross Convent, Alexandria, Ont.	"	90	"
27. Superior School, Millford, N.B.....	"	135	"
28. Art, Historical and Scientific Association, Vancouver, B.C.....	"	135	"
29. Superior School, Dalhousie, N.B.....	"	135	"
30. " " Hillsborough, N.S..	"	135	"
31. Provincial Normal School, Truro, N.S.	"	135	"
32. Superior School, St. Martin's, N.B...	"	135	"
33. " " Salisbury, N.B.....	"	135	"
34. Public School, Elgin, N.B.....	"	90	"
35. Columbia Methodist College, New Westminster, B.C.....	"	135	"
36. Superior School, Harvey Station, N.B.	"	135	"
37. High School, Douglastown, N.B.....	"	135	"
38. Public School, Petitcodiac, N.B.....	"	80	"
39. Superior School, Hampton, N.B.....	"	135	"
40. Lakeside School, Hampton Station, N. B.....	"	80	"
41. Public School, Maugerville, N.B.....	"	80	"
42. Caledonia High School, Seneca, Haldimand County, Ont.....	"	135	"
43. Public School Inspector, Toronto, Ont.	"	135	"
44. High School, Hagersville, Ont.....	"	135	"

Educational collections supplied—*Cont.*

45. Superior School, Butternut Ridge, N. B.	consisting of	120	specimens.
46. Windsor Academy, Windsor, N.S.	"	120	"
47. Sydney Academy, Sydney, N.S.	"	120	"
48. Public School No. 3, Harvey, N.B.	"	120	"
49. Forest Glen School, Forest Glen, N.B.	"	80	"
50. Grammar School, Chatham, N.B	"	120	"
51. Public School, Rat Portage, Ont.	"	80	"
52. " " Boiestown, N.B.	"	80	"
53. Harkin's Academy, Newcastle, N.B.	"	120	"
54. High School, Newbury, Ont	"	120	"
55. Public School, Shenston, N.B.	"	80	"
56. Albert Public School, Hopewell, N.B.	"	80	"
57. Grammar School, Campbellton, N.B.	"	120	"
58. City Hall, London, Ont.	"	160	"
59. High Commissioner, London, England	"	122	"

"Making a total of 6,665 specimens, aggregating over two tons in weight of material.

Collecting of minerals.

"In addition to the foregoing work, Mr. Willimott visited, in the course of the summer—for the purpose of procuring further material for the making up of collections for educational purposes—the townships of Hull, Templeton, Wakefield, Buckingham and Orford, in the province of Quebec, and those of Bagot, MacNab and Ross, in the province of Ontario.

"Whilst so engaged, he collected a large and varied assortment of minerals, comprising:—

	Specimens.	Weight.
Actinolite	100	
Albite	....	75 pounds.
Amazon stone	100	
Apatite, crystals	100	
" in calcite	100	
" pyroxene in calcite	100	
Baryta	....	150 "
Calcite, crystals	....	150 "
"	100	
Chrome garnet	100	
Diorite—from Bagot	....	200 "
" —from Wakefield	100	
Dolomite, tremolitic	....	100 "
Fluorite	100	
Gneiss	....	100 "
Graphite, disseminated	....	100 "
Hornblende-schist	....	200 "
Idocrase, crystals, loose	150	
" " in gangue	20	
Jasper	....	150 "

Collecting of minerals.

	Specimens.	Weight.
Limestone (marble)	....	150 pounds.
" hydraulic	....	150 "
" serpentine	....	150 "
Microcline	....	75 "
Molybdenite	75	
Ochre	....	30 "
Phlogopite, crystals (amber coloured)	150	
" " (black)	75	
Pyroxene "	300	
" massive	100	
Quartz	....	75 "
Rutile	75	
Sandstone	....	100 "
Titanite	....	100 "
Tourmaline	100	
Tremolite	....	200 "

"The foregoing included some handsome cabinet specimens which have been placed in the Museum.

"Mr. Willimott has also received—

	Weight.
Clay iron-stone, collected by Dr. G. M. Dawson	150 pounds.
Calcareous tufa, collected by Mr. Geo. Stewart, Banff.	150 "
Basalt, collected by Mr. J. McEvoy	200 "
Tufaceous sandstone, collected by Mr. J. McEvoy.	200 "
Hornblende, presented by Mr. R. Hamilton	100 "
Tremolite " "	50 "
Talc, received through Mr. W. F. Ferrier	100 "
Mispickel " "	150 "
Selenite, collected by Mr. E. R. Faribault	150 "

LITHOLOGY.

Lithology

Mr. W. F. Ferrier, lithologist, reports on the work of the past year as follows:—

"Labels have been prepared for the stratigraphical collection of rocks, and those for the flat cases are now all placed in position. As the nomenclature of the majority of the rocks is, as yet, of necessity, based largely on their macroscopic characters, and therefore liable to some alterations, written, instead of printed, labels have in the meantime been provided. It is intended to arrange typical local sets of rocks in the large drawers under the museum cases, where they will be readily accessible to those wishing to study the geology of any particular district.

Lithology—*Cont.*

"The microscopical work of the year included the examination of fifteen additional thin sections of rocks from the Kamloops district, British Columbia, also of thirty sections of rocks from Labrador. The results of the former examination have been incorporated in the appendix to Dr. Dawson's report, which is now in the press, whilst those of the latter will form an appendix to Mr. Low's report on the interior of Labrador.

"Much time has been occupied in the study of Mr. Barlow's interesting and important rocks from the Nipissing and Temiscaming sheets, numbering in all some one hundred and fifty specimens, and the work is now nearing completion. One hundred typical rocks of the West Kootanie district, British Columbia, collected by Mr. McConnell, have been sectioned, but, as the field-work is not yet completed, examinations of only a few of the specimens have as yet been made.

"Twenty-four specimens of Archæan rocks were sent to Prof. H. A. Nicholson of the University of Aberdeen, and sixty-one—principally Archæan—to Prof. Groth of Munich, in exchange for specimens received.

"The miscellaneous work carried on during the year, included many macroscopical determinations of rocks and various microscopical or blowpipe examinations of building stones, minerals and miscellaneous materials.

"Two papers were, with the permission of the Director, published in the 'Ottawa Naturalist,' in one of which the occurrence of stilpnomelane *var.* chalcodite and crystallized monazite, at Canadian localities is recorded for the first time.

Examinations in the field.

"Having detected erythrite, the hydrous arsenate of cobalt, and smaltite, the arsenide of that metal (usually containing some nickel) in some samples of ore given to me by Mr. John Stewart, in 1892, from the Dominion Iron Mine, lot 2, concession II., of Madoc township, in the county of Hastings, Ont., it was thought advisable that I should visit the locality in order to ascertain the extent of the deposit of these cobalt minerals. Accordingly, during the summer, I went to Madoc and examined the mine where they occur as carefully as the circumstances would permit. No work has been done at the opening for many years, and consequently it is difficult to make out the precise relations of the cobalt minerals to the main mass of ore, but they appear to occur in bands or seams, one of which was noted dipping at a high angle. The width of these bands, judging from specimens collected on the dumps, must in some instances have been two feet or

more. Blocks of the iron-ore sometimes show surfaces of over nine inches square coated almost completely with thin-bladed crystals and earthy coatings of the erythrite, which still retains its beautiful peach-red and pink tints of colour, although exposed so many years to the action of the weather. Little masses of earthy erythrite also occur filling cavities, and this mineral appears to have been largely derived from the alteration of smaltite, etc. The smaltite, of a tin-white colour on a freshly fractured surface, is distributed through the iron-ore, usually in small but very perfect crystals, mainly cubes and octahedrons, which, when weathered, tarnish, and greatly resemble iron-pyrites. The massive mineral has also been observed. The minute crystals are often thickly aggregated together so as to form small patches in the iron ore. Lithology - *Cont.*

"Several other localities in Hastings county were visited and numerous specimens of rocks and minerals collected, amongst which the fine glassy crystals of epidote from a new locality on lots 10 and 11, concession XIX., of the township of Tudor, are worthy of mention."

Mining and Mineral Statistics.

This work has been carried on upon the usual lines under Mr. E. D. Ingall's control. The absence of Mr. H. P. Brunnell on leave, for three months, and his subsequent resignation for the purpose of accepting an engagement in the line of his profession, to some extent interfered with the progress of the work for the time being. Mineral statistics

The early months of the year were taken up with the work of collecting and compiling statistics of the production of the country for 1894. A summarized statement was prepared as usual in advance of the main report. It was completed on 30th March, and was printed and distributed shortly afterwards. This was earlier than in any previous year.

The manuscript of the report on mineral statistics and mines for 1893, was completed last April, but it was subsequently decided to add to this the figures of mineral production in 1894. The report thus enlarged has since been printed and at the time of writing is nearly ready for distribution.

In the latter part of the year, the usual preparations were made for the collecting of statistics and general information regarding mining operations in the Dominion for 1895.

Mineral statistics—*Cont.*

During the year, various memoranda have been prepared in reply to questions upon special subjects, and in connection with mining and the mineral resources of the country.

Much of Mr. Ingall's time during the summer, was taken with the special investigation of the iron-ore deposits in the vicinity of the Kingston and Pembroke railway, in which work Mr. A. M. Campbell acted as general assistant. A first report upon the results of the investigation has been given on preceding pages, under the heading Ontario, in which province the entire district examined is comprised.

Palæontology and Zoology.

Palæontology and zoology.

Mr. Whiteaves submits the following report upon the work done in these branches of the Survey's operations.—

Publications.

"The second part of the third volume of 'Palæozoic Fossils' was published in September, 1895, and has since been distributed. It consists of two papers, the one a 'Revision of the Fauna of the Guelph formation of Ontario, with descriptions of a few new species' and the other a 'Systematic List, with references, of the Fossils of the Hudson River or Cincinnati formation of Stony Mountain, Manitoba.' The first of these papers was written in 1894, but the receipt of an important consignment of additional specimens from Mr. J. Townsend, in January, 1895, necessitated considerable additions to the manuscript and a final revision thereof. The second was written in the early part of 1895.

"Considerable progress has been made with the MS. of the third part of the third volume of 'Palæozoic Fossils.' This part is intended to consist of an illustrated report upon the fossils of the Cambro-Silurian rocks of Lake Winnipeg and its vicinity, based upon the large collections made by various officers of the Survey during the last fifteen years or more. A paper description of eight new species of fossils from these rocks has been published in the 'Canadian Record of Science' for July last.

Fossils from British Columbia.

"Ten boxes of fossils from the Cretaceous rocks of Hornby, Denman and Vancouver islands, have been received from Mr. Walter Harvey, of Comox, B.C., and one box of fossils from the Comox River, B.C., from Mr. J. B. Bennett of Comox. These have been critically examined and most of the species determined. They throw much new light on the fauna of these rocks, and give some new and important information which it is intended to utilize in the preparation of the fourth and

concluding part of the first volume of 'Mesozoic Fossils.' In the mean time, a paper entitled 'Notes on some Fossils from the Cretaceous Rocks of British Columbia, with descriptions of two species that appear to be new,' has been published in the April number of the 'Canadian Record of Science.' This paper consists of a preliminary description, which it is intended to reprint, with such modifications as may be necessary and with illustrations, in the 'Mesozoic Fossils,' of some of the most interesting specimens in Mr. Harvey's collections. These specimens he has generously presented to the museum. No short-tailed decapod crustaceans or fossil crabs had previously been recorded as occurring in the Cretaceous rocks of the Dominion, but in the collections of fossils made by Mr. Harvey in 1891-93 at Hornby Island and the Comox River, there are several specimens of three species. Specimens of each of these, and of an additional species of fossil crab from the Cretaceous rocks of the Queen Charlotte Islands, were sent to Dr. Henry Woodward, F. R. S., president of the Geological Society of London and an authority on fossil crustacea,—who exhibited them at the meeting of the British Association at Ipswich last September, and read a paper upon them, in which all four were described as new to science. Palæontology and zoology—*Cont.*

"In September, also, Dr. C. F. Newcombe, of Victoria, B.C., visited the Queen Charlotte Islands and collected a fine series of the fossils of the Cretaceous rocks at Skidegate and Cumshewa inlets, which he has kindly promised to send to the writer for examination. So far, four consignments of these fossils have been received and most of the species therein have been determined. Dr. Newcombe has also sent, during the year, some additional species of fossils from Hornby and the Sucia islands. The whole of these specimens will be most useful in enabling the writer to complete a revision of the fossil faunæ of the Cretaceous rocks of the Queen Charlotte and Vancouver islands. In the early fall a few days were spent, with Dr. Ells and Mr. Giroux, in the examination of several rock-exposures on the Island of Montreal and its immediate vicinity, and in determining the exact geological horizon of each, upon purely palæontological evidence. At St. Vincent de Paul, on Isle Jésus, the lower beds of the Trenton limestone, with their characteristic fossils, were seen to lie immediately and conformably on the Black River limestone.

"In Zoology, a paper entitled 'Additional notes on Recent Canadian Unionidæ' was published in the April number of the 'Canadian Record of Science,' and another, a 'Note on the occurrence of *Primnoa reseda* on the coast of British Columbia,' was read at the last meeting of the Royal Society of Canada, and has since been Zoology.

Palæontology and zoology—*Cont.*

published in its Transactions. A small series of recent marine shells from Alert Bay, B.C., has been named for Mr. Harvey, in return for favours received, and specimens of eighty-five named species of duplicate shells, mostly from the Vancouver district, have been sent to Mr. Herbert H. Smith, of Brooklyn, New York, in exchange for specimens received last year.

"Several interesting additions to the Survey's collection of native birds, birds' eggs, mammals, etc., have resulted from Professor Macoun's explorations in the North-west Territories during the past summer, (and more particularly a pair of the Sage Grouse, *Centrocercus urophasidnus*, and a fine example of the Yellow-haired Porcupine, *Erethizon dorsatus*, var. *epixanthus*, both from the White-Mud River, Assiniboia) but these will be referred to more in detail in his report. In addition to these, several interesting species of mammals, birds, birds' eggs, etc., have been acquired by presentation, exchange or purchase. Among them are a specimen of the Red-backed Mouse, *Evotomys rutilus*, from Metcalfe, Ontario; two specimens of the Whistling Swan, *Olor Columbianus*, one from St. Clair Flats, Ontario, the other from Manitoba; a fine male of the brown Pelican, *Pelecanus fuscus*, shot on Pictou Island, N.S.; a female Richardson's Merlin, *Falco Richardsonii*, with three downy young ones,—and a female American three-toed Woodpecker, *Picoides Americanus*,—all from the neighbourhood of Calgary, Alberta. The acquisition of these and of other rare specimens for the museum often entails considerable trouble and a more or less lengthy correspondence. Four mammals and 110 specimens of birds have been mounted by Mr. S. Herring during the year, and he has gone over and cleaned, as he does annually, all the mounted vertebrata in the museum. The collection of stuffed birds, mammals, etc., for the museum in connection with the Rocky Mountain Park at Banff, referred to in my last report, was sent there in the spring."

Work of Dr. Ami.

"Dr. H. M. Ami has during the year completed the local lists of fossils to accompany Dr. Ells's report on the Geology of the south-west quarter-sheet of the 'Eastern Townships' map of Quebec. This appendix contains an extensive series of systematic lists of fossil organic remains, arranged chronologically and zoologically, employed in the definition of the different geological formations represented, in so far as these have yielded fossils.

"A similar appendix has been prepared to accompany a report on the geology of the Great Manitoulin and other islands in Lake Huron by Dr. R. Bell, including fossil remains from the Cambro-Silurian formations of that district.

"Systematic lists of fossils have also been prepared and filed, for reference, from collections made by Dr. R. W. Ells, Mr. J. F. Whiteaves, Dr. W. E. Deeks, the late J. Richardson, Mr. T. C. Weston, Mr. N. J. Giroux, the late Scott Barlow, Mr. W. F. Ferrier, Dr. Robert Bell, Mr. A. E. Barlow, Mr. Hugh Fletcher and by himself and others from various places in the provinces of Nova Scotia, New Brunswick, Quebec and Ontario. These lists include collections (1) from twenty-two localities in Nova Scotia; (2) from thirty-four localities in Quebec; (3) from eight localities in New Brunswick and from seven localities in Ontario. A considerable addition of material both new to Canada and new to science was made during the year, and among other valuable additions are several Cambro-Silurian forms which serve to illustrate species described by R. P. Whitfield and Alpheus Hyatt from the 'Fort Cassin Rocks' of Vermont. Palæontology and zoology.—*Cont.*

"The examinations above referred to, comprise in all more than 60 separate collections. Besides these, he has also recorded for reference lists of fossil organic remains from the Cretaceous coal-bearing rocks at Anthracite, Alberta; from the Silurian of Hamilton, Ont., collected by Col. C. C. Grant; from Highgate Springs, Vermont, collected by himself in 1883; from the Shumardia limestone of Point Lévis &c., collected by Mr. T. C. Weston, 1894.

"Work has been continued on the fossils of Lake Temiscaming, where an interesting outlier of the Silurian occurs, and drillings obtained from a couple of borings have been examined and reported upon. In the early part of the year he prepared a provisional catalogue of the species of fossil remains contained in the collection, and began a catalogue of the species of fossils described by the late E. Billings, with exact references.

"Much miscellaneous work of a routine character has also been attended to, such as the reception and cataloguing of specimens, both palæontological and ethnological.

"On the 25th of September, Dr. Ami was instructed to go to Nova Scotia for the purpose of obtaining, if possible, palæontological evidences of the age of certain rocks of Pictou county, in conjunction with work carried on there by Mr. Hugh Fletcher. He spent nearly four weeks there, and obtained a large suite of specimens, which, in many cases, serve to throw considerable light upon the age of the iron-bearing rocks of Pictou county. A few days were also spent in Antigonish county and in Cape Breton with Mr. Fletcher in similar work. Field-work.

"During the year, Dr. Ami has been absent on leave for a period of nearly four months on account of illness.

Palæontology and zoology—*Cont.* Work of Mr. Lambe.

"During the first half of the year, Mr. L. M. Lambe was engaged in a preliminary study of the fossil corals of Canada, with the idea of concentrating later on each group in turn, the object being a revision of this important class. It was necessary at first to ascertain what material was available for study besides the specimens exhibited in the museum cases. To accomplish this end, about ninety boxes, in the outbuildings, containing fossils from different horizons and from many typical localities in several parts of the Dominion, were examined, and any corals that were thought likely to throw light on the structure, etc., of the peculiar group were selected and placed in the basement workroom in the Survey building so as to be readily accessible. From the duplicate specimens in the drawers beneath the museum cases, a series of corals was also selected. These in conjunction with those already mentioned constitute the mass of material now arranged for study.

"Having completed a preliminary examination of the Canadian fossil corals as a whole, Mr. Lambe in the latter half of the year concentrated on a few particular groups, in the hope of adding to the knowledge of their structure and affinities and of their relation to geological horizons in this country. Critical notes relative to certain genera and species have been prepared and it is hoped to have the first of a series of short papers ready for publication shortly.

"In connection with work being carried on by Mr. Whiteaves, Mr. Lambe has also, during the year, prepared drawings of certain fossils from the Cretaceous rocks of the Pacific coast and the Trenton of Lake Winnipeg, to illustrate the papers or reports already mentioned as published or in course of preparation. Drawings were also made of a collection of Tertiary plants from Burrard Inlet, B.C., to be used in illustration of a paper, by Sir J. William Dawson, for the current volume of the Royal Society of Canada. The specimens described and illustrated in this paper are chiefly those collected by officers of the Survey or presented to it. These have now been named and returned to the museum.

"While finishing his studies of the recent marine sponges of the North Pacific, he named for the Smithsonian Institution at Washington, D.C., the remainder of the specimens collected by Dr. Dall some years ago in that region, and received for the museum in return, a first set of duplicates of the collection.

Contributions to museum.

"The following is a list of specimens collected by or received from officers of the Survey during the year 1895, in addition to those collected by Professor Macoun, which will be found enumerated in his report:—

Contributions to museum—*Cont.*

Dr. Robert Bell :—

Several specimens of Devonian fossils from the lower part of Moose River. Bird-skins from Manitoba and Cross Lake, Nelson River.

Dr. R. W. Ells :—

Several specimens of Cambro-Silurian fossils from Montreal and its vicinity.

J. B. Tyrrell :—

About twelve specimens of five species of Cambro-Silurian fossils from Markham Lake, on Telzoa River. About 200 specimens of 20 species of Cambro-Silurian and Silurian fossils from the mouth of Churchill River. Forty specimens of marine shells, from Hudson Bay. About thirty specimens of fresh-water shells from Manitoba and Keewatin.

Dr. H. M. Ami :—

1320 specimens of Palæozoic fossils from various formations in Pictou Co., Nova Scotia.

100 specimens from the productive coal measures of Indian Cove, North Sydney, Cape Breton Co., Nova Scotia.

A. P. Low :—

Fifty specimens of fossils from the Cambro-Silurian rocks at the Radnor Forges, Champlain Co., Que.

L. M. Lambe :—

Three specimens of Trenton fossils from Cap à l'Aigle, Murray Bay, Que.

Wm. McInnes :—

One bone skin-scraper, from Otukamamoan Lake, Rainy River District.

N. J. Giroux :—

One hundred and fifty specimens of fossils from Glengarry, Prescott, Russell, Stormont and Dundas. Fifteen marine fossils from the Pleistocene deposits of the counties of Soulanges and Glengarry.

James McEvoy :—

One stone pestle from the interior of British Columbia.

W. J. Wilson :—

About forty specimens of Utica fossils from Clear Lake, Renfrew Co., Ont.

Contributions to museum—*Cont.*

The additions to the palæontological, zoological and Ethnological collections during the year, from other sources, are as follows:—

By presentation:—

(A. *Palæontology.*)

Sir J. W. Dawson, Montreal:—

A series of named specimens of four species of Microsauria, and one specimen of the rare *Anthrapalæmon Hilli*, all from the Coal Measures of the South Joggins, N.S.

J. B. Hobson, Vancouver, B.C.:—

Eight specimens of fossil fishes from the Tertiary rocks of the Horse-fly River, B. C.; three specimens of two species of fossil wood from the auriferous gravels of the same river; and three specimens of two species of fossils (*Monotis* and *Aulacoceras*) from a Triassic boulder at the Horse-fly Hydraulic Mining Company's pit, Cariboo, B.C.

C. Hill-Tout, New Westminster, B.C.:—

Twenty-four specimens of fossil plants from Burrard Inlet, B.C.

Colonel C. C. Grant, Hamilton, Ont.:—

Seven specimens of fossils from the Niagara formation at Hamilton, and one from the Hudson River or Trenton drift.

Alex. Graham, Ottawa:—

Humerus, ulna and part of radius of seal (probably *Phoca Grœnlandica*) from the Pleistocene clay at Graham's brick-yard, near Ottawa.

James Gibbons, Edmonton, Alberta:—

Portion of molar of mammoth found about six miles above Edmonton.

C. A. Magrath, Lethbridge, Alberta:—

Fine large specimen of an Ammonite (*Placenticeras placenta*) from the Cretaceous shales near Lethbridge.

Walter Harvey, Comox, B.C.:—

Fine specimens of *Anisoceras Vancouverense*, and three other rare or unique Cretaceous fossils from Hornby Island, the types of two species recently described in the 'Canadian Record of Science.'

Contributions to museum—*Cont.*

J. B. Bennett, Comox, B.C. :—

Two specimens of a long-tailed decapod *(Podocrates Vancouverensis)* from the Cretaceous rocks of the Comox River, B.C.

The Smithsonian Institution, Washington, D.C. :—

A fine specimen of a fossil coral *(Streptelasma robustum)* from the Galena Trenton of the Red River Valley, Manitoba.

W. H. Porter, Fort Erie, Ont :—

Four specimens of fossils from the Corniferous rocks at Fort Erie.

T. C. Weston, Ottawa :—

Fifteen specimens of rare fossils from the Lévis limestones and shales at Lévis, P.Q.

Dr. H. M. Ami, Ottawa :—

Fifty specimens of fossils from the Montcalm market rocks, Quebec city ; fifty specimens of graptolites from the Intercolonial railway cutting at Lévis, P. Q.; 100 specimens of graptolites from lot 5, range XV., Magog Township, Lake Memphremagog, P.Q., and a small collection from the Devonian shales, holding *Spirophyton*, at Sargent's Bay, Lake Memphremagog.

Walter F. Ferrier, Ottawa :—

Eleven species of fossils from the Pleistocene of Montreal, Murray Bay and Rivière du Loup, and twelve specimens of fo sils from the Trenton limestone at Murray Bay.

(B. *Zoology.*)

The Smithsonian Institution, Washington, D.C. :—

Forty specimens of twenty-two species of recent marine sponges from the North Pacific and Arctic Ocean.

Rev. W. Lowndes, Nassau, N.P.:—

Twenty-one species of marine shells from Nassau.

John McMenomy, Metcalfe, Ont. :—

Specimen of the Long-eared or Red-backed mouse (*Evotomys rutilus* var. *Gapperi)*, from Metcalfe.

J. H. Fleming, Toronto, Ont. :—

Egg of the king eider *(Somateria spectabilis)*, from the Cary Islands, Baffin's Bay.

Contributions to museum—*Cont.*

R. A. Fowler, Emerald, Lennox, Ont. :—

Mottled variety of field mouse *(Arvicola riparia ?)*, from Emerald.

R. S. Lake, Grenfell, Assa. :—

Two eggs of Swainson's hawk *(Buteo Swainsonii)*, three of the mallard *(Anas boschas)*, and five of the pintail *(Dafila acuta)*, from Assiniboia.

James Fletcher, Ottawa :—

Seven specimens of *Limnæa ampla*, from Brome Lake, P.Q.

Walter Harvey, Comox, V.I. :—

Five specimens of *Mactra falcata* and three of *Psammobia rubroradiata*, from Denman Island, P.Q.

(C. Ethnology.)

H. B. Munro, Renfrew, Ont. :—

One hundred and forty-two Indian implements from Lytton and Boothroyd's Flat, B.C., and from the vicinity of Pembroke, Ont.

W. H. Porter, Fort Erie, Ont. :—

Three arrow-heads, two sinkers and two fragments of Indian pottery, from Fort Erie.

C. Hill-Tout, Vancouver, B. C.:—

Forty specimens of chipped arrow- and spear-heads from Burrard Inlet, B.C.

James White, jun., Elphin, Ont. :—

One copper spear-head or knife found in Dalhousie township, Lanark, near the shore of Dalhousie Lake.

Mrs. De Hertel, Perth, Ont. :—

Copper spear-head ploughed up about thirty-five years ago near the head-waters of the Mississippi River, Frontenac Co., Ont.

Dr. T. W. Beeman, Perth, Ont. :—

One arrow-head of quartzite and two fragmentary spear-heads from Rideau Lake, Ont. :—

Malcolm McMurchy :—

One stone skin scraper, six fragments of pottery, a fragment of a pipe and a chipped flint, from the township of Collingwood, Ont.

Contributions to museum—*Cont.*

By exchange :—

Eggs of fifteen species of North American birds.

Trumpeter swan *(Olor Americanus)*, from St. Clair Flats, Ont., and females of the following species from western Ontario :— Semipalmated sandpiper, *(Ereunetes pusillus)*; turnstone *(Arenaria interpres)*; meadow lark *(Sturnella magna)*; American goldfinch *(Spinus tristis)*; white-throated sparrow *(Zonotrichia albicollis)*; chipping sparrow *(Spizella socialis)*; red-eyed Vireo *(Vireo olivaceus)*; Nashville warbler *(Helminthophila ruficapilla)*; chestnut-sided warbler *(Dendroica Pennsylvanica)*; and Blackburnian warbler *(Dendroica Blackburniæ)*.

By purchase :—

Brown Pelican *(Pelecanus fuscus)*, adult male shot on Pictou Island, N.S., in 1892.

Richardson's merlin *(Falco Richardsoni)*, adult female, and three downy young, from near Calgary, Alberta.

American three-toed woodpecker *(Picoides Americanus)*, adult female, from near Calgary.

Three eggs of the canvas-back Duck *(Aythya vallisneria)*, from Snake Lake, Alberta.

Twenty-eight bone implements and ten stone implements, of Indian manufacture, from various localities in British Columbia.

One copper implement (gouge or adze) from the township of Canonto, Ont.

Natural History.

Natural History.

Under this head, Prof. Macoun reports as follows upon the work accomplished in the office and museum.—

"After the date of my last summary report, I prepared a complete tabulated list of the birds known to occur in the Dominion of Canada and Alaska, as well as of all stragglers that have been taken on our northern coasts. The total number of forms known to occur in Canada is 624, of which 443 are represented in the museum collection. Our chief desiderata are sea-birds, and stragglers from Europe which are difficult to obtain. After the completion of this work, I began the arrangement of our Lichens. This, and the routine work of the office occupied me until my departure for the field.

Natural History—*Cont.*

"My assistant, Mr. Jas. M. Macoun, has been for the whole year occupied with herbarium work, but has not yet reached the collections of the past season; and the work of distributing exchanges has progressed but slowly, though enough have been labelled by Miss Barry, to balance accounts with those from whom we have received specimens, when time to distribute them is available.

Determination of specimens.

"The number of collections sent to the herbarium for determination increased materially during the year and was especially large during the collecting season. This branch of the work consumes considerable time, but it is a means of adding to our knowledge of distribution as well as a help to collectors. The most important of these collections were received from H. H. Gaetz, Red Deer, Alberta; Rev. H. H. Gowen, New Westminster; Dr. Newcombe and A. J. Pineo, Victoria, B.C.; and R. Cameron, Niagara, Ont. Of the Survey staff Messrs. Bell, Low and McEvoy brought in small collections from the regions in which they had been working.

Specimens distributed.

"Since December 31st, 1894, 4318 sheets of specimens have been sent to scientific institutions and individuals, for the most part in exchange for specimens sent us for our herbarium. The herbaria to which the la rgestnumber of specimens were sent, are :—

The British Museum	199
Kew Gardens	724
The Gray Herbarium, Harvard University	458
Botanical Museum, Copenhagen	125
Botanical Museum, Christiania	325
California Academy of Sciences	300
United States National Museum	295
Columbia College	339
University of Minnesota	150
Botanic Gardens, Natal	125
Missouri Botanic Gardens	426

"Specimens have been received during the year from all the institutions mentioned above, with the exception of the British Museum, Kew Gardens and the California Academy of Sciences. The most important collections were from Newfoundland and the state of Washington, both sent from the Gray Herbarium. Of the exchange with collectors, no details need be given here.

Additions to herbarium.

"The most valuable contribution to the herbarium during the year, was a set of the plants collected by Dr. G. M. Dawson, when on the Boundary Commission during the summers of 1873-74, in the vicinity of the forty-ninth parallel between the Lake of the Woods and the Rocky Mountains. This comprises about 400 species.

"During the year 3717 sheets of specimens have been added to our herbarium, as follows:— Natural History—*Cont.*

Canadian	1371
United States	895
European	373
Cryptogams	1078
Total	3717

"The work of the botanical department is at present in a better condition than it has ever been, and, after all the herbarium material has been got out, an attempt will be made to effect further exchanges for desiderata and to work up and describe some of the doubtful and new species in our herbarium. Routine office and herbarium duties have in the past left little time for this most important branch of our work."

The following short report, also by Prof. Macoun, relates to field work carried out by him during the season, in the North-west Territory:—

"In accordance with your instructions, I left Ottawa on May 13th, reaching Moose Jaw three days later. On the morning of the 18th, I started south with two men, a wagon and light cart, and provisions for two months. Our first camp was on Old Wives Creek, fifty miles from Moose Jaw. Field work by Prof. Macoun.

"During the summer and autumn of 1894, there had been no fires between Moose Jaw and the crossing between Old Wives Lakes, yet the old grass was extremely short and the whole surface showed the effects of the long-continued drought, in the seedless grass, the cracked sod, the parched soil and dried-up ponds and grass-marshes. West of the crossing, the prairie had been swept by fire during August of last year, and only the hollows were now green. All the uplands were black, giving little or no response to the warmth of the sun.

"This was the condition of the country when the first rain came on May 24th. It rained, more or less, all day, and the next morning the moisture had penetrated three inches into the soil and by the evening of the 25th was down another inch. The effects of the rain were seen almost immediately, and very soon the black or brown hills had changed to green.

"Formerly Old Wives Creek was well-wooded throughout the lower part of its course, but now the wood is dead, and in a few years there will not be a stick left. The wood consisted of box-elder, with a little green ash and willow. There are still large thickets of shrubs, chief

Natural History—*Cont.*

among which are choke-cherry, cornus, white thorn, willows, saskatoon berry, rose bush and gooseberry.

"While camped on Old Wives Creek, large collections of birds, birds' eggs, small mammals and plants were made. On May 31st, we went south ten miles, to the forks of Old Wives Creek, passing for the whole distance over an undulating plain covered with short grass.

"At 'the forks' we found the skeleton of a turtle and a large dark-coloured water-snake, both of which must be very rare, as no more of them were seen during the season. The turtle is, apparently, the Oregon golden-turtle, *Chrysemys Oregonensis*, which Dr. Coues obtained in the Souris River in 1874. The water-snake was large, dark brown on the back and reddish-yellow beneath, and is probably the red-bellied water-snake, *Tropidonotus erythrogaster*, Shaw.

Rainfall.

"Between May 24th and June 2nd, there were almost daily showers, and by the latter date the moisture had, on the level prairie, got down into the soil nearly six inches, and the grass and flowers feeling its influence, began to grow with vigour.

"A day and a half after leaving the forks of Old Wives Creek, we reached Twelve-mile Lake, near Wood Mountain, and camped on the creek at its head. We saw no fresh water between Old Wives Creek and Twelve-mile Lake, and at Thirty-mile Creek, where we camped for a night, the water was so bad that one of the horses became sick from its effects. Owing to the long-continued drought, there was no water in the country except in running streams, and as this was the case all summer, our drinking water was carried in a barrel on the wagon.

Birds breeding.

"Twelve-mile Creek was found to be almost dried up, but the marsh at its head received the waters of the creek, and in the upper part of it waders and water-birds were still breeding, though in diminished numbers, as both shelter and water were scanty. Fully sixty species of birds were breeding, or preparing to do so, in and around the lake and on the prairie, but mammals of all kinds were very scarce.

"During the early days of June, more or less rain fell every day, and on the 8th there was a severe storm which left the ground whitened with snow until noon the next day. On the 10th we moved to Wood Mountain post, and by this time the rains had penetrated to such a depth that the drought was overcome and the soil thoroughly moistened. So rapid had been the change from brown to green in the covering of the country that men were heard to say that for eleven years grass had never before been so good at this season.

"Wood Mountain may have deserved its name many years ago, but now it is almost treeless and except in the stream-valleys and sides of coulées, there is no wood whatever. Protected by the Mounted Police considerable young wood is growing up around Wood Mountain post, and were fires prevented, the hillsides where snow-drifts form would soon be forest-clad; for the aspen roots are still there, and were groves once started they would increase every year as the drifts would extend and give adequate moisture for tree growth.

Natural History—*Cont.*

Protection of young trees at Wood Mountain.

"From Wood Mountain post we travelled south until we reached the Boundary mound near Rocky Creek, where we camped. For two days we explored the 'Bad-lands' to the north-east of our camp and found the hills cut by the action of rain and frost into a great variety of shapes, but the vegetation about them differed in no respect from that of other alkaline soils. Scarcely a green thing was found on the hills themselves, owing to the waste that is constantly going on. A number of rare birds were breeding in crevices on the hillsides and nests of the arctic blue-bird, rock wren, Parkman' wren, the bald headed eagle and many species of hawks were seen, or taken. We hoped here to get specimens of the sage hen, but on account of our ignorance of its habits we failed to secure any. Seven fine males were seen but disappeared before we got within range. We obtained good specimens later, on White Mud River, and learned that they are found the whole length of that river from the Boundary to, and into, the Cypress Hills. They live among the sage brush (*Artemisia cana*) in the river-valley, and lie so close that without a dog it is almost impossible to flush them. The last trace we saw of them was at Farewell Creek in the Cypress Hills.

Bed-lands near Wood Mountain.

"On June 17th we again left Wood Mountain post, with the intention of making our way to Cypress Lake near Fort Walsh on the south side of Cypress Hills. We reached the lake on June 29th and camped on Sucker Creek which enters the lake at its eastern end, where its discharge formerly was. For a number of years the waters of the lake have been drying up, and Sucker Creek now flows into the lake instead of into White Mud River.

"The grass was good, in fact very good, from Wood Mountain post to the crossing of the White Mud River, a distance of seventy miles. Water was found in all the branches of Old Wives Creek, but all ponds and marshes were dry and no water-fowl were seen at any time. Wood was even scarcer than water, for not a bush was seen except at the 'Holes,' where the watershed was crossed. The valley of the White Mud is wide and covered with sage-brush (*Artemisia cana*),

Grass good from Wood Mountain west.

Natural History—*Cont.*

greasewood *(Sarcobatus vermiculatus)* and cactus *(Opuntia Missouriensis)*. These may be said to constitute the great bulk of the vegetation in the river-valley from the boundary up into the Cypress Hills. Only four small trees were observed in the valley, and willow scrub was far from being continuous. Owing to the character of the river-bottom, safe crossings are few and even wading across is not always safe. We kept south of the river for thirty-one miles and in that time saw neither bush nor water. We then crossed to the north side and in a day reached East End post, where the old trail crosses the White Mud River. From there we ascended into the Cypress Hills, crossing over to Frenchman's Creek on which we camped for a day and made extensive collections of plants as well as careful notes on birds and mammals.

"Passing westward twenty-seven miles further, we camped at Sucker Creek for three days, while we communicated with Maple Creek and obtained supplies for our journey to the south. The four days spent here were devoted to collecting specimens of the flora and fauna of the vicinity, and much valuable information was obtained.

"We were now able to compare the fauna and flora of Old Wives Creek and Wood Mountain with that of the Cypress Hills, and found that in their main features there was very little difference. This was particularly true of the vegetation along the water-courses and of the prairies. It may be said here that from Moose Jaw to the foot-hills of the

Forag plants.

Rocky Mountains, by the course we travelled, the forage plants are practically the same. Locally they may vary slightly, but speaking generally there is no change. On rich and rather moist soil, the herbage and grasses are taller but the species are always the same. My decided opinion, after a summer spent on the open prairie, is that were shelter and water assured, there is no part of the southern prairie where cattle and horses will not fatten as well as along the foot-hills of the Rocky Mountains. Our horses ate only prairie grass all summer, and pulled a heavy wagon 1200 miles over faint trails or the unbroken prairie, reaching Moose Jaw in better condition than when they left in the middle of May. Day after day I watched them eat, and as they were always picketed they had to clean off the grass pretty well. While we were on the open prairie scarcely a blade was left; in the creek- or river-valleys, where the grass was good in our estimation, they were fastidious and ate only a few species. In the Cypress Hills and foot-hills of the Rocky Mountains they invariably left the 'bunch' grasses and turned to the species that formed a sward and grew on the driest ground. While the bunch grasses are therefore not so suitable for pasture, they are spoken of in Southern Alberta as being

valuable for hay, and are in winter often the only available food when the shorter grasses are covered with snow. The very grass *(Festuca scabrella)* that is cut for hay on the Belly River ranches, grows all over the Cypress Hills and could be made into hay there. The fact that horses and cattle leave the coarser grasses untouched when pasturing, must not be taken as proof that they would not be readily eaten as hay in winter. Our cultivated grasses in the east are neglected in the same way, when shorter, sweeter grasses are to be had. If cut at the proper time, these coarse grasses are just as nutritious as the finer kinds, though perhaps not so pleasant to the taste. All the grasses of the prairie region are nutritious, but all are not suited for pasture, and while horses seem to prefer hay composed of grasses only, cattle will eat with avidity almost any green thing if made into hay.

Natural History—*Cont.*

"With an increase in the number of settlers and a wider knowledge of the capabilities of the country, Southern Assiniboia will become a valuable district. As regards its soil and climate, much of it is suited for agriculture, but my purpose now is to draw attention to the numerous small streams traversing it and the ease with which this water could be used for irrigation purposes and the watering of stock. It is not intended to assert that at present this region is in a condition to receive a large influx of settlers, but I do wish to say that the time will surely come when cattle, sheep and horses will be as plentiful in Southern Assiniboia as they now are in Southern Alberta. The settlement of this region will necessarily be slow, as it is almost wholly devoid of trees, and water is at present scarce, especially in the winter; but all these difficulties will in time disappear, as there are no physical disabilities which cannot be overcome by care and patience. As an experiment, a moderate outlay towards the sources of Swift Current Creek, would soon show whether a series of small dams in the region under consideration would not store enough water to irrigate sufficient land to produce hay, and a supply of water for a number of ranches or sheep farms, besides what might be needed for root crops and grain. Cattle and horses quite wild were frequently seen during the summer. They had evidently lived out all winter.

Value of Southern Assiniboia.

Erection of dams for irrigation purposes recommended.

"The first three days of July were very hot, and they had a marked effect on the grass south of Cypress Lake. On the 4th and 5th, we traversed the driest section seen during the summer, and camped on Spur Creek, a western branch of Willow Creek. Between Cypress Lake and Willow Creek, the grass was short but formed a sward. As we went west, the soil grew drier, and bare patches with more cactus frequent, especially after we crossed Willow Creek. This section had

Natural History—*Cont.*

escaped the June rains, and everything had ceased to grow, so that between Battle Creek and Spur Creek scarcely a plant had produced a flower.

"Very heavy rain fell on the 5th and 6th and saturated the whole country, so that from that date we had no difficulty in finding good water in pools. From Willow Creek to Sage Creek we crossed a cactus and alkaline plain, and owing to the recent rains found it

Cactus plain.

almost impassable. This was the only worthless tract we saw during the summer, and where we crossed it, it was less than sixteen miles wide. A few miles south of Sage Creek we crossed a ridge, and could then look over the valley of Many-berries Creek as well as the Milk River country beyond it. Before we reached the ridge the soil had changed, and henceforth the grass was excellent and no bad-lands or poor pasture were seen again.

"After crossing Many-berries Creek, we turned south and kept down it until we reached the margin of Milk River, and could see the river meandering from side to side of the valley at least 300 feet below

Milk River.

us. We now turned up the Milk River, and for over 100 miles, until we came to Milk River Ridge, always kept it in sight, and occasionally camped near it and descended into its valley and made natural history collections. A trip was made from the 'Castellated Rocks' to the West Butte, and collections and observations were made which showed the flora of the Sweet Grass Hills to be the same with that of the foot-hills of the Rocky Mountains.

"After passing these hills, we noticed a slight change in the vegetation, and although we were assured that the rainfall was light, we were convinced that the air contained more moisture, and hence produced heavier dews and retarded evaporation. Gradually the grass became taller, and a few miles east of the Benton Trail, a geranium (*G. incisum*), that is a real hygrometer, began to appear on the damp slopes of the hillsides and afterwards increased so much that it was a very prominent feature of both thicket and prairie in the foot-hills of the mountains.

Milk River Ridge.

"We were unfortunate in our weather while examining the Milk River Ridge, as it rained a great part of the four days we spent on it. Large collections were, however, made, and many notes taken on the fauna and flora. The 'Ridge' is a plateau with a system of lakes and creeks which contain excellent water and are the home of many species of water-fowl. A large part of the interior produces hay in great abundance, which is cut every year and taken to Lethbridge, the Police posts, and to various ranches in the neighbourhood.

"Late on the evening of July 20th, we descended the north-western face of the Ridge and camped near Pot-hole Creek. This stream is well named as it is nothing but a series of pools of very good water. The next day we reached the St. Mary River and camped in its valley. Extensive collections were made there, as well as in the valley of Lees Creek at Cardston and in the 'big bend' of Belly River. On the evening of July 27th we camped on the shore of Waterton Lake, almost under Sheep Mountain, which rises steeply from the water to an altitude of 7500 feet. Natura. History—*Cont.*

"After reaching the St. Mary River, the whole country was covered with tall grass, which, in most places, was fit for hay and the soil was exceptionnally good. South of the Blood Reserve, between the St. Mary and Belly rivers, most of the land has been homesteaded by the Mormons and some very good farming has been done around Cardston and vicinity. All the settlers there expressed themselves as well pleased with the locality and their prospects. Morman settlements.

"Six days were spent collecting around Waterton Lake and on Sheep Mountain, and over 200 species of plants added to the season's list. On August 2nd, we started north, crossed Waterton River at Stand Off on the 3rd and passing by Fort McLeod reached Lethbridge on the 7th. From there I went by train to Medicine Hat, where I made collections of plants, as well as at Maple Creek, Moose Jaw and Indian Head, leaving the latter place on August 16th and reaching Ottawa on the 19th. The outfit in charge of my assistant and the teamster, I sent across the country from Lethbridge to Moose Jaw where they arrived August 28th.

"During the season close attention was given to the distribution of the summer birds of the region traversed and many interesting results were obtained. Besides their distribution, their breeding habits and the structure of their nests was carefully noted, and eggs were collected of at least seventy species during the past two seasons. Up to date the number of species of birds recognized in Assiniboia and Alberta is 226. Nearly all of them are represented in the museum collection. Waterfowl and waders breed in the above districts in enormous numbers, and egging expeditions, along the line of the Canadian Pacific Railway and north of it, should be stopped by the necessary legislation; as from the writer's personal knowledge such expeditions, in which thousands of eggs of game birds are destroyed, have been taking place for the past five years, greatly to the injury of the country. Distribution of birds.

"Botanical collections were made in all parts of the region traversed, and the distribution and occurrence of the species noted, and since my return the plants collected have been examined and determined.

Natural History—*Cont.*

"Perhaps the most important result of the past season's work, as shown by the flora of the region traversed, is that from Western Manitoba to the Milk River Ridge, the plants of Southern Assiniboia are practically identical with those of Southern Alberta. A comparison of these plants with collections made by me in 1879, at and around the Hand Hills, lead me to believe that Northern Assiniboia and Alberta have a warmer climate than the region south of the Missouri water-shed, probably as a result of lower elevation.

Causes of drought.

"Following out your instructions, I made inquiries of every person I met regarding the drought and the alleged drying up of the whole prairie region. Although the reasons given were often diverse, all agreed that lakes, pools and marshes were drying up, and that where water formerly stood, hay was now being cut. At every point visited during the summer, I took notes on the condition of the country, which have been in part embodied in the preceding summary. The conclusion I have reached is that such changes are periodic, throughout the region visited, and that the present dry period will pass and the lakes and ponds fill again.

"This agrees with the opinions expressed by most of the old settlers. If the snowfall is light and evaporates without turning into water, and this is followed by a dry spring, the ponds and marshes dry up, but if there is a heavy fall of snow in April or early May, the ponds will be filled and water plentiful.

"Last August, the drought was broken everywhere, and the ground fairly moist, but no water collected either in ponds or the sites of old lakes. Should this winter be a normal one and the melting snow in spring saturate the ground, I look forward confidently to a quick return of the condition of ten years ago. At any rate, I am satisfied that the permanent drying up of the country is a myth.

"Over 100 skins of birds and about 50 mammals were secured, principally of species collected last season."

Mr. J. Fletcher on Entomological collection.

Mr. James Fletcher, F.R.S.C., Entomologist and Botanist to the Central Experimental Farm, to whom the Geological Survey is greatly indebted for his services as honorary curator, in connection with the entomological collections in the museum furnishes the following report upon these collections:—

"I beg to report that the entomological collections are in good order, and that a few additions have been made during the past year.

The most important additions were contributed by Prof. John Macoun, who brought back a collection of Lepidoptera from seven different localities in the west. Natural History—*Cont.*

"The following rare species are worthy of record :—

Anthocharis Olympia, Walsh's Ranch, Old Wives Creek, 23rd May.
Hypparchia Ridingsii, *Satyrus Œtus*, *Chrysophanus Sirius*, } Milk River, near West Butte, 14th July.

"A small collection was also brought in by Dr. Robert Bell, and another was contributed by Mr. J. C. Gwillim. These consisted of only a few specimens ; but as each insect was labelled with the locality and date of capture, they have a scientific value as bearing on the known distribution of species.

"A small collection of Coleoptera was made by Mr. A. P. Low in Labrador, and since I last reported to you, collections were made on the Alaska Boundary survey by Messrs. Ogilvy, St. Cyr and Wolston Small, and have been handed in.

"In accordance with your suggestion, I am preparing for the Museum of the Rocky Mountain Park at Banff a collection of butterflies characteristic of that neighbourhood. This will I think be ready by April next."

Maps.

Mr. James White reports as follows upon the condition of the mapping work in the office, and upon a connecting line of survey run by him in Ontario for the purpose of establishing the latitude and longitude of points in sheet No. 118 of the Ontario series :— Maps.

"The ordinary routine work in connection with the laying down of projections and general supervision of the draughting has been attended to. Considerable time was also given to the preparation of the new list of publications.

"As the position of the townships in sheet 118, Ontario (Haliburton sheet) was somewhat doubtful, you deemed it advisable to connect the south-western part of the sheet with some point whose position had been accurately determined. In accordance with instructions I left Ottawa on the 16th September and proceeded to Gelert Station, where I joined Mr. Barlow. From this point we carried a traverse-line with transit and chain to the village of Waubashene on Georgian Bay, as its position had been determined by Commander Boulton in connection with the Georgian Bay survey. This fixes the position of

Maps—*Cont.* the townships in the south-western part of sheet No. 118 and along the traverse-line through the northern part of sheet No. 114. A few of the results are appended herewith, adopting the position of the Episcopal church at Waubashene (the terminal point of the survey) as given on chart No. 2102, viz., Long. 79° 42′ 24″ W., Lat. 44° 45′ 29″ N.:—

Gelert Station.....Long. 78° 37′ 02″; Lat. 44° 53′ 52″
Kinmount Station.....Long. 77° 35′ 07″; Lat. 44° 46′ 47″
Norland Post Office.....Long. 78° 48′ 39″; Lat. 44° 43′ 34″
Narrows between Lakes Couchiching and Simcoe.....Long. 79° 21′ 44″; Lat. 44° 36′ 16″

"A similar traverse in 1893 from Kingston to Sharbot Lake gave the following result:—

Sharbot Lake Station.....Long. 76° 41′ 29″; Lat. 44° 46′ 18″

"The maps published during the past year and in the course of preparation, are appended herewith.

MAPS PRINTED IN 1895.

	Area in square miles.
556. British Columbia—Kamloops Sheet—Geology.—(Dr. Dawson). Scale 4 miles to 1 inch.....	6,400
557. British Columbia—Kamloops Sheet—Topography, economic minerals and glacial striæ. (Dr. Dawson). Scale 4 miles to 1 inch.....	6,400
567. British Columbia—Sketch-map of the Finlay and Omenica rivers.—(Mr. McConnell). Scale 8 miles to 1 inch.....	7,000
560. Western Ontario—Sheet No. 6—Seine River Sheet.—(Messrs. McInnes and Smith). Scale 4 miles to 1 inch (preliminary edition).....	3,456
558. New Brunswick, Prince Edward Island and Nova Scotia.—Sketch-map showing area occupied by Pleistocene glaciers at their maximum extension.—(Mr. Chalmers). Scale 40 miles to 1 inch.....	132,800
559. New Brunswick, Prince Edward Island and Nova Scotia.—Sketch-map showing striation from local glaciers and floating ice during closing stage of the Pleistocene.—(Mr. Chalmers). Scale 40 miles to 1 inch.....	132,800
561. New Brunswick and Nova Scotia—Sheet 4 N. W.—Cumberland Coal-field Sheet—Surface Geology. (Mr. Chalmers). Scale 4 miles to 1 inch.....	3,456
562. New Brunswick—Sheet 2 S. E.—Richibucto Sheet.—Surface Geology. (Mr. Chalmers). Scale 4 miles to 1 inch.....	3,456

563. New Brunswick and Prince Edward Island—Sheet 5 S. W.—Buctouche Sheet.—Surface Geology. (Mr. Chalmers). Scale 4 miles to 1 inch..... 3,456

387. Nova Scotia—Sheet No. 33—Cape George Sheet.—(Mr. Fletcher). Scale 1 mile to 1 inch..... 216

388. Nova Scotia—Sheet No. 34—Antigonish Town Sheet.—(Mr. Fletcher). Scale 1 mile to 1 inch..... 216

389. Nova Scotia—Sheet No. 35—Lochaber Sheet.—(Mr. Fletcher). Scale 1 mile to 1 inch..... 216

390. Nova Scotia—Sheet No. 36—West River St. Marys Sheet.—(Messrs. Fletcher and Faribault). Scale 1 mile to 1 inch.... 216

550. Nova Scotia—Sheet No. 37—Liscomb River Sheet.—(Mr. Faribault). Scale 1 mile to 1 inch..... 216

551. Nova Scotia—Sheet No. 38—Mosers River Sheet.—(Mr. Faribault). Scale 1 mile to 1 inch..... 216

MAPS, ENGRAVING OR IN PRESS.

Western Ontario—Sheet No. 9—Lake Shebandowan Sheet.—(Mr. McInnes). Scale 4 miles to 1 inch..... 3,456

Ontario—Sheet No. 125—French River Sheet.—(Dr. Bell). Scale 4 miles to 1 inch..... 3,456

Ontario—Sheet No. 126—Manitoulin Island Sheet.—(Dr. Bell). Scale 4 miles to 1 inch..... 3,456

Ontario—Sheet No. 131—Lake Nipissing Sheet.—(Mr. Barlow). Scale 4 miles to 1 inch..... 3,456

Quebec—Lièvre River and Templeton Phosphate Mining District. Sheets I. and II.—(Messrs. Ingall and White). Scale 40 chains to 1 inch..... 220

Quebec—South-west quarter-sheet of the "Eastern Townships" map—Montreal Sheet. Scale, 4 miles to 1 inch..... 7,200

Nova Scotia—Sheet No. 39—Tangier Sheet.—(Mr. Faribault). Scale 1 mile to 1 inch..... 216

MAPS, COMPILATION COMPLETED.

Athabasca Territory and British Columbia—Sheets I., II. and III. (to illustrate the work of Mr. McConnell, 1889-90, and extending from long. 110° W. to 120° W. and lat. 54° N. to 60° N. Scale 8 miles to 1 inch..... 150,000

District of Keewatin and Province of Ontario—Vicinity of Red Lake and part of Berens River—(Mr. Dowling). Scale 8 miles to 1 inch..... 8,240

Ontario—Kingston and Pembroke Mining District.—(Mr. White). Scale 4 miles to 1 inch..... 1,700

Quebec and North-east Territory, Labrador Peninsula, extending from the Atlantic Ocean to Hudson Bay and from the River St. Lawrence to Hudson Strait.—(Mr. Low). Scale 25 miles to 1 inch..... 525,000

Maps—*Cont.*

Nova Scotia—Sheets Nos. 40 to 42 and 49 to 52.—(Mr. Faribault). Scale 1 mile to 1 inch	1,512
Nova Scotia—Sheets Nos. 43 to 48.—(Mr. Fletcher). Scale 1 mile to 1 inch	1,296

MAPS, COMPILATION INCOMPLETE.

British Columbia—Shuswap Sheet.—(Mr. McEvoy). Scale 4 miles to 1 inch	6,400
British Columbia—West Kootanie Sheet.—(Mr. McConnell). Scale 4 miles to 1 inch	6,400
North-eastern Manitoba—Lake Winnipeg Sheet.—(Messrs. Tyrrell and Dowling). Scale 8 miles to 1 inch	20,000
Ontario—Sheet No. 129—Mississagui River Sheet.—(Dr. Bell). Scale 4 miles to 1 inch	3,456
Ontario—Sheet No. 138—Lake Temiscaming Sheet.—(Mr. Barlow). Scale 4 miles to 1 inch	3,456
Quebec—North-west quarter-sheet of the "Eastern Townships" Map.—(Messrs. Adams, Giroux and Low). Scale 4 miles to 1 inch	7,200
Quebec—Sketch-map of part of Joliette, Terrebonne, Montcalm, Argenteuil and Ottawa counties.—(Dr. Adams). Scale 4 miles to 1 inch	
New Brunswick—Sheet 1 N. W.—Fredericton Sheet.—Surface Geology. (Mr. Chalmers). Scale 4 miles to 1 inch	3,456
New Brunswick—Sheet 2 S. W.—Andover Sheet.—Surface Geology. (Mr. Chalmers). Scale 4 miles to 1 inch	3,456
Nova Scotia—Sheet No. 10A—Cape Dauphin Sheet.—(Mr. Fletcher). Scale 1 mile to 1 inch	216
Nova Scotia—Sheet No. 12A—Sydney Sheet.—(Mr. Fletcher). Scale 1 mile to 1 inch	216
Nova Scotia—Sheet No. 12B—Little Glace Bay Sheet.—(Mr. Fletcher). Scale 1 mile to 1 inch	216
Nova Scotia—Sheets Nos. 53, 54, 55 and 66, 67, 68 and 69.—(Mr. Faribault). Scale 1 mile to 1 inch	1,548
Nova Scotia—Sheets Nos. 56 to 65, 76, 82, 100 and 101.—(Mr. Fletcher). Scale 1 mile to 1 inch	3,024

LIBRARY.

Library.

Dr. Thorburn, Librarian of the Survey, reports that during the past year ended December 31, there were distributed 12,583 copies of the Survey publications, comprising reports, special reports, and maps. Of

these 9,924 were distributed in Canada, the remainder, 3,375, were sent as exchanges to other countries. Library—*Cont.*

There were sold during the year 1,711 publications, consisting of reports and maps, for which the sum of $388.49 was received.

There were received, as exchanges and donations 2,247 publications.

There were purchased 44 publications and the periodicals subscribed for were 31.

The number of volumes bound was 154.

In connection with the library 745 letters were received, in addition to 1,367 acknowledgments.

The number of letters sent out from the library was 553, besides 578 acknowledgments.

It is estimated that there are now in the library about 11,000 volumes besides a large collection of pamphlets. These relate mainly to the various branches of Geology, Mineralogy, Botany and Zoology.

It may be stated that the books in the library are available for consultation by any one wishing to obtain information in regard to any scientific subject in which he is interested, and a number of persons from time to time, take advantage of this provision.

VISITORS.

The number of visitors to the museum continue to increase, notwithstanding the imperfect manner in which a large part of the collections are displayed in the present building. During the year 1895, 26,785 names were registered in the visitors' book. Visitors.

STAFF, APPROPRIATION, EXPENDITURE AND CORRESPONDENCE.

The strength of the staff at present employed is 47. Staff.

During the calendar year the following changes in the staff have taken place:

Dr. A. R. C. Selwyn, superannuated.

Mr. H. P. Brumell, resigned.

Dr. G. M. Dawson, appointed director and deputy head, *vice* Dr. Selwyn.

Mr. D. B. Dowling, appointed to the second class.

Mr. C. O. Sénécal, appointed to the second class.

Mr. James McEvoy, appointed in the technical class.

Mr. R. A. A. Johnston, appointed in the technical class.

Appropriation and expenditure.

The funds available for the work, and the expenditure of the Department during the fiscal year ending the 30th June, 1895, including appropriations for boring in Alberta, were:

——	Grant.	Expenditure.
	$ cts.	$ cts.
Civil list appropriation	51,925 00	
Geological Survey appropriation	61,129 51	
Artesian boring "	16,000 00	
Civil list, salaries		48,763 39
Exploration and survey		14,767 93
Wages of temporary employees		16,723 88
Boring operations, Deloraine		88 22
" " Athabasca Landing		7,688 82
Printing and lithography		18,424 23
Purchase of books and instruments		1,416 09
" chemicals and chemical apparatus		224 02
" specimens		175 56
Stationery, mapping materials and Queen's Printer		1,640 01
Incidental and other expenses		1,967 41
Unpaid balances, 30th June, 1894		1,142 92
Advances to explorers on account of 1895-96		4,773 87
		117,796 35
Less—Paid in 1893-94 on account 1894-95		214 63
		117,581 72
Unexpended balance Civil list appropriation		3,161 61
" " Artesian boring appropriation		8,311 18
	129,054 51	129,054 51

The correspondence of the department shows a total of 7999 letters sent, and 8271 received.

I have the honour to be, sir,
Your obedient servant,

GEORGE M. DAWSON,
Deputy Head and Director.

CROWFOOT,

CHIEF OF THE BLACKFOOT NATION.

Died, 25th April 1890, aged 69 years.

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF INDIAN AFFAIRS

FOR THE

YEAR ENDED 30th JUNE

1895

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY
1896

No. 14—1896.] *Price* 45 *cents.*

Department of Indian Affairs.

To His Excellency the Right Honourable Sir John Campbell Hamilton Gordon, Earl of Aberdeen, &c., &c., &c., Governor General of Canada, &c., &c., &c.

MAY IT PLEASE YOUR EXCELLENCY :—

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Indian Affairs for the fiscal year ended 30th June, 1895.

All of which is respectfully submitted.

T. MAYNE DALY,
Superintendent General of Indian Affairs.

OTTAWA, 31st January, 1896.

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REPORT

OF THE

DEPARTMENT OF INDIAN AFFAIRS

FOR THE

YEAR ENDED 30TH JUNE, 1895.

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DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, 2nd December, 1895.

To the Honourable T. MAYNE DALY,
Superintendent General of Indian Affairs.

SIR,—I have the honour to submit the report of this department for the year ended the 30th June, 1895. In doing so, I am glad to be able to inform you that the considerable measure of prosperity with which the Indians in all parts of the Dominion have been favoured, and the tranquility which has characterized their relations to each other, to the government and the white population generally, would have been unmarred but for the occurrence of two exceptional events.

The first of these I may refer to was the lamentable loss of 26 of our British Columbia Indians who perished through the capsizing of a sealing schooner near Cape St. Elias in a storm which occurred in April last. The loss of these men, deplorable enough in itself, is all the more deeply felt because 20 widowed women and orphaned children have been by it deprived of their natural protectors and the bread winners of the families.

The second event was the death at the hands of a Blackfoot Indian of Mr. Frank Skynner, the issuer of rations on the reserve. While this catastrophe is deeply deplored by the department, which fully shares the grief of relations and friends for the untimely termination of so promising a life, which fell a sacrifice in the path of duty, it does not attach any significance to it in so far as the attitude of the Indians to their guardians is concerned, for the Indian who committed the crime was, at any rate for the time being, unbalanced in his mind on account of the loss of a child, for which no one was responsible.

The immediate effect, however, was to unsettle the Indians on the reserve, who, doubtless fearing that a feeling of hostility might have been engendered towards them as a result of the action of one of their number, became very suspicious, and the slightest imprudence in dealing with them might have made the position

extremely critical. However, by the exercise of considerable tact, complete confidence and harmony were soon restored.

I dwell upon this event because I am of the impression that the general public have very little idea of the dangers to which our employees in the younger provinces are still exposed, nor of the amount of courage and determined firmness combined with tact required to deal with, and, often in their own interests, to coerce tribes in whose breasts the latent fire will never become entirely extinct, at any rate until those who originally entered into treaty relations shall have passed away; and I think it speaks volumes for the officials and employees of the department that any serious interruption of the amicable relations existing between them and the Indians is of such extremely rare occurrence.

INDIANS AFFECTED BY GENERAL COMMERCIAL DEPRESSION.

In considering the question of prosperity, it has to be remembered that the general depression in trade, which, although but slightly in comparison with other countries, was felt in Canada, could not fail to exercise detrimental influence upon so considerable a section of the community as that of the Indian population.

While it has been the policy of the department to reclaim Indians by attaching them to and teaching them to draw their subsistence from the soil, endeavour has been made to encourage the pursuit of every other honest industry and form of employment which would contribute to make them self-supporting.

Consequently, the Indians are, according to their different circumstances, more or less dependent upon fishing and hunting—upon their labour in the lumber camps, in driving logs, in loading vessels, in helping farmers, in acting as guides to tourists, &c., &c., as also upon the sale of hay, cordwood and articles manufactured by themselves, such as rustic chairs and tables, baskets, lacrosse sticks, moccasins, bead-work. A moment's consideration will show that a depression in trade, with consequent scarcity of money, must greatly affect the market for labour and the sale of such commodities as have been mentioned; and it is to be further remembered that, so far from there having been any unusually abundant harvest in 1894 to offset what has just been referred to, the crops were, at any rate in some districts, unusually poor.

AMOUNT OF DESTITUTE RELIEF REDUCED.

Notwithstanding these circumstances, a reduction has been effected throughout the provinces in the amount of relief distributed to the destitute, and increased vigilance has been exercised to ensure the relief given reaching only those by whom it is absolutely required. In so far as the North-west Territories are concerned, although in some parts the crops in 1894 were excellent, in others the Indians had actually nothing, and thus the curtailment of assistance could not be fully carried out as intended.

INDIVIDUAL EARNINGS INCREASED DESPITE ADVERSE CONDITIONS.

On the other hand, bearing in mind what has just been said, it is a matter for surprise and congratulation that, despite the unusual obstacles encountered, the individual earnings have throughout the Dominion, as compared with last year, in-

creased by the handsome amount of $96,633.00, after deduction of $160,000.00 on account of the Cowichan Agency which reports for the first time this year, and must therefore in fairness be left out of the comparison, having aggregated $1,602,005.00, as against the preceding year's aggregate of $1,345,372.00.

This increase would have been still more marked had the Indians of the province of Quebec been able to hold their own, but their earnings for the year fell short of the preceding year's amount by something like $18,000.00. This must not, however, be quoted to their discredit, because the particular manufactures and occupations upon which they rely were most seriously affected by the depression in the United States, whence come, under favourable circumstances, numbers of tourists, upon whom some of the Indians depend chiefly for their market, and as a matter of fact the year's earnings, although actually smaller, probably represent a good deal more exertion than that by which the larger amount of the former year was secured.

In British Columbia the increase was most marked, being, exclusive of the amount of $160,000.00 already referred to, one of $89,665.00, doubtless to an extent attributable to improvement in the prices obtained for furs.

In the North-west Territories the gain upon the former year was one of $29,361.00—the aggregate amount earned being $120,759.00—a very creditable showing for all concerned.

Fortunately for the Indians, Providence, which "tempers the wind to the shorn lamb," sent them an unusually mild winter, so that one way and another they got through the year with a very fair degree of comfort.

INDIANS ACCUMULATING CATTLE.

The mildness of the winter was equally beneficial to the stock, which has of late years been so largely increasing in the hands of Indians, more especially in the North-west Territories. The Indians there, after having furnished from their herds all the beef required for the year at the various agencies and reserves with a few exceptions, now hold an aggregate of 15,378 head of horned stock, in addition to sheep and pigs, as against 1,230 head in 1885, just a decade ago, when the Indians virtually began to raise stock.

ACREAGE UNDER CULTIVATION.

With regard to the cultivation of the soil, the number of acres actually under cultivation by Indians throughout the Dominion was 118,840, and the number newly broken 2,664, being an increase in area as compared with the year before of 253 and 160 acres respectively.

The aggregate gain, in so far as area is concerned, is not extensive, but the comparative failure of the crop the year before in the North-west Territories left the Indians somewhat short of seed, but the department believes it to be in their best interests to leave them as far as possible to fight their own way out of such difficulties; and although as a consequence the acreage cultivated in Manitoba and the Territories was materially reduced, the Indians have pulled through, as has been said, without receiving more eleemosynary assistance, yet without undue privation,

and will in the end be better and more self-reliant than if more seed had been supplied them.

In any case, however, the department does not lay stress upon a mere increase of the area under cultivation, since its policy is, at any rate in the earlier stages of development, to restrict the area cultivated by each Indian to within such limits as will enable him to carry on his operations by the application of his own personal labour and the employment of such simple implements as he would be likely to be able to command if entirely thrown upon his own resources, rather than to encourage farming on a scale to necessitate the employment of expensive labour-saving machinery. With further reference to the reduction in area cultivated within the North-west Territories, it may in part be attributed to the increasing success attending the department's efforts to encourage the cultivation of more roots and vegetables, especially in places where it has been found that cereals can not be depended upon.

HARVEST.

Although somewhat exceeding the strict boundaries of time to which this report is limited, it may be stated that, in so far as can be gathered at this date, the Indians in Manitoba and the North-west Territories have as a rule had their share of the abundance which has characterized the recent harvest in these districts, although, considering the vast extent of territory through which the agencies are scattered and the consequent variation of climatic influences, it need occasion no surprise to learn that at some points conditions prevailed which have unfortunately excluded some agencies and reserves from participating in the general good fortune.

In the other provinces the crops are reported as fairly good on the whole, although in some places hay, oats and potatoes have suffered a good deal from the effects of drought.

HEALTH.

With regard to health, the year has been on the whole an extremely favourable one, little or no serious sickness having been reported from any point, with the exception of parts of Nova Scotia and New Brunswick, where in this respect the Indians do not seem to have fared as well as their brethren in other parts of the Dominion. There have, of course, been the proportion of deaths from various causes incidental to all communities, and as usual among the Indians the greatest number of victims has been claimed by consumption, often supervening upon scrofula. Of epidemic disease there appears to have been none, unless for the appearance of la grippe on one reserve in the North-west Territories.

Small-pox, it is true, broke out in the Cowichan Agency, in British Columbia, as did typhoid fever at Pointe Bleue, in the province of Quebec; but fortunately these were promptly and effectually stamped out before getting a chance to spread. It speaks very well for the amount of attention given to the department's rules governing the observance of sanitary precautions on the reserves, that not only have no such diseases as could be attributed to their neglect taken any hold among the Indians, but that they have in more than one instance escaped outbreaks from which communities of whites in their neighbourhood have suffered.

Department of Indian Affairs.

INDIAN POPULATION INCREASING.

Probably no better proof can be afforded of the successful and benevolent treatment of the Indians than the fact that, although in parts of the Dominion the Indians are at the most trying stage of existence, viz., that of transition from the natural to the more artificial condition involved in civilization, their numbers have increased within the last year by somewhat over two thousand souls. It is admitted that in a measure the increase is the result of somewhat more extended and accurate returns; but on the other hand a decrease in the Indian population of British Columbia of 111 souls has to be attributed to the same cause, and the inference just contended for, may, it is thought, be fairly drawn from a net gain of over two thousand souls.

CONDUCT OF INDIANS.

The conduct of the Indians has as usual been such as will compare favourably with that of their fellow subjects in the Dominion. Among the tribes in the North-west Territories the most warlike are those in Treaty No. 7, and they have been the most recently brought under the influence of civilization and restraint of law. They are, moreover, by their situation in the heart of a ranching district, and proximity to the border of the United States, subject to peculiar temptation to indulge their natural inclination to make raids upon the settlers' cattle and upon the horses of tribes across the line.

Some few of the younger and wilder spirits, thirsting in some way to emulate the deeds which, by their fathers, were, not many years ago, considered most meritorious, and thus to establish a reputation for bravery—have committed depredations on the ranchers' cattle, but have been speedily taught through the combined energetic action of the North-west Mounted Police Force and of our own officials that such propensities cannot be indulged in with impunity, and for some time past no complaints have been heard.

The greatest evil against which the Indians have to contend is intemperance. To this they are peculiarly exposed in consequence of constitutional predisposition, and when this is considered it is marvellous how many of them refrain from indulgence in strong drink; yet, despite special legislation for their protection from this curse, from one place and another come reports from our officials of the extent to which the Indians suffer on account of the disregard of the law. The department does what it can to repress the evil, but so long as unprincipled white men abound who find the pernicious traffic so profitable as to encourage them to run the risk of a fine or even a short term of imprisonment, it will be impossible to put a stop to it, and elsewhere it has been found necessary and productive of excellent results to do away with the option of a fine for this offence, and to impose much longer terms of imprisonment than provided under the statutes of the Dominion.

EDUCATION.

To turn to the most important subject of education, increased opportunities for observation strengthen the conviction as to the soundness of the policy of recent years adopted by the department: to do away as far as funds and circum-

stances will permit with day schools on the reserves and substitute industrial and boarding schools at a distance from them.

INDIANS INDIFFERENT ABOUT DAY SCHOOL EDUCATION.

Speaking generally, it is disheartening to find the wide-spread indifference manifested by Indian parents with regard to regularity of, or indeed any, attendance by their children at the day schools. No doubt this may to some extent be attributable to the fact that the fondness for their offspring, which is so admirable a characteristic of Indian parents, prevents the exercise of firmness, which, of course, is necessary even to compel children more or less prepared by heredity to undergo the confinement and discipline of school.

The kind of education imparted at these day schools could not, under the most favourable circumstances, be expected to produce any such results as are derived from training at industrial and boarding schools, when withdrawal to a distance removes the children from the retarding influences of the reserve, and ensures uninterrupted attention to their studies.

INDIANS LEARNING TO VALUE INDUSTRIAL INSTRUCTION.

It is, therefore, quite intelligible why, although parents may not set much store by the day schools, they should, when they get over their first reluctance to parting with their children and, among the less civilized bands, their suspicion of the government's intentions in endeavouring to place them in industrial institutions, learn from the marked results to realize the value and count the benefits of industrial training for their children; and it is gratifying to find that not only is the prejudice against these institutions among the Indians of British Columbia, Manitoba and the North-west Territories fast disappearing, but in some instances a difficulty is arising about finding room for candidates for admission.

BENEFITS OF INDUSTRIAL TRAINING.

It has justly been said by one greatly interested in Indian industrial training that no system of Indian training is right that does not endeavour to develop all the abilities, remove prejudice against labour, and give courage to compete with the rest of the world. The Indian problem exists owing to the fact that the Indian is untrained to take his place in the world. Once teach him to do this, and the solution is had.

ACQUISITION OF THE ENGLISH LANGUAGE A NECESSITY.

To a certain stage in an Indian's advancement there exists but little doubt that he should be kept in communities; but as soon as that stage is reached, and it should be at an early period, he should be brought to compete with his fellow whites; but in order that this may be done effectually he must be taught the English language. So long as he keeps his native tongue, so long will he remain a community apart.

If the Indian has not had, with his white neighbours, the same chance to acquire industrial knowledge, he cannot be blamed for not having these qualities equally with us, and for all we do for him we must from the first consider the English

language quality, for without it he is permanently disabled, and from what Indians have said to me and from requests made by them, it is evident that they are beginning to recognize the force of this themselves. With this end in view the children in all the industrial and boarding schools are taught in the English language exclusively.

Of late years there has been a pretty well recognized and rational policy, and it seems most desirable that it should be carried into execution with as much vigour as possible, so that the results anticipated from it may be reached as speedily as possible.

If it be found expedient to educate Indian children, then surely the more who are so educated the better. If the schools be regarded as the chief factors of the great transformation that is being wrought, it would seem a natural and logical sequence to establish as many as the country's finances will admit of. It is, as already said, rapidly becoming easier to secure the attendance of children; and the work of education has gone sufficiently far to show beyond question the advisability of educating them to self-support. If it were possible to gather in all the Indian children and retain them for a certain period, there would be produced a generation of English-speaking Indians, accustomed to the ways of civilized life, which might then be the dominant body among themselves, capable of holding its own with its white neighbours; and thus would be brought about a rapidly decreasing expenditure until the same should forever cease, and the Indian problem would have been solved.

NUMBER OF SCHOOLS IN OPERATION.

During the year there have been in operation 19 industrial, 26 boarding, and, including 12 assisted outside of treaty limits, 245 day schools, having 8,175 children on their rolls, with an average attendance of 4,819.

Attendance is affected not only by indifference on the part of parents already referred to, but by the necessarily migratory habits of a considerable proportion of the Indians, especially those who live by hunting. It may be noticed that in a few instances Indian children attend the white children's schools, which slightly increases the number shown to be under educational influences. Of the children at industrial institutions, 596 have been instructed in some one or more of the following trades,—farming, carpentry, shoemaking, printing, tailoring, blacksmithing, tinsmithing, baking and mechanical engineering. At the inception of industrial institutions there must be received pupils comparatively few of whom are of an age to learn a trade, but as the schools in Manitoba, the North-west Territories and British Columbia grow older, and their pupils with them, a considerably larger portion will learn trades.

PRIZES WON BY INDUSTRIAL SCHOOL PUPILS AT THE TERRITORIAL EXHIBITION.

In proof of what is being done at the industrial institutions, I cannot do better than quote from that part of the annual report of the Assistant Commissioner of Indian Affairs for Manitoba and the North-west Territories, where, speaking of the Territorial Exhibition recently held at Regina, he says,—

"The school work, writing problems and maps (both in drawing and relief) was exceptionally good, as is well evidenced by the fact that the Qu'Appelle Industrial School took first prize for a set of relief maps in open competition with every school in the Territories, also the first prize for writing and a second prize for an individual map."

"The following prizes were all won by Indians in open competition with the whole of Manitoba and the North-west Territories:—

Iron harrows	1st prize	Jos. Kent, Rupert's Land School.	
Boots, riding	do	W. R. Bear, Elkhorn	do
do	2nd prize	John Wright, Regina	do
Boots, ladies'	1st prize	Roy Hawekowekit, Elkhorn	do
do	2nd prize	Blackhorse,	do do
Shoes, men's	1st prize	Wm. McGirr, Dunbow	do
do	2nd prize	Jno. Severight, Regina	do
Shoes, ladies'	1st prize	Roy Hawekowekit, Elkhorn	do
Boots, collection	Diploma	Elkhorn	do
Harness, set, heavy	do	Frank Seaton, Regina	do
do light	do	C. McDonald, Elkhorn	do
Specimen of woodwork, tool chest		T. Quoquet, Rupert's Land	do
Model stair-case	Special prize.	do	do do
Iron farm gate	1st prize	A. Woodhouse,	do do
Set of maps (8)	do	Qu'Appelle School.	
Individual map	2nd prize	do	
Specimen of writing	1st prize	do	

"The brass bands belonging to the Qu'Appelle, St. Joseph's (High River), Regina and St. Albert Schools supplied nearly all the music at the Fair, and won universal praise for the excellence of their playing, their time and attack being admirable, especially considering the fact that they were only Indian lads from ten to eighteen years of age.

"During the term of the Fair, a daily newspaper was published by some of the pupils of the Regina School, who form the printing staff of that institution, and the little paper was highly appreciated by the visitors, who watched with delight the dexterity with which the little fellows set up the type and forms."

OUTING SYSTEM FOR INDUSTRIAL SCHOOL PUPILS.

The system of sending the more advanced pupils out to service among the settlers is working admirably.

The advantages are obvious, for of course when comparatively isolated from their own people and in close daily association with the settlers, they not only acquire increased proficiency in the English language, but also in the habits and ways of thought pertaining to the whites. A contingent advantage is, that room is thus made for the reception into the schools of more children from the reserves; and, of course, care is exercised in the selection of suitable families where the children will be well treated and subjected to proper influences. An eye is kept on them, and they are encouraged to keep in touch with the institutions from which they are sent out, and in fact to regard them as their homes. The sparseness of settle-

ment so far makes it difficult to extend this system as rapidly as might be desired. However, this difficulty will, with the growth of the country, disappear.

Returns showing pupils out at service for the last month of the past quarter have so far reached the department from the Qu'Appelle and Regina institutions.

At Qu'Appelle there are shown to have then been out at service 22 girls—who had then been so engaged for periods ranging from one month to nearly five years, and who were earning from $2.00 to $10.00 a month.

Three boys were also out, two of whom were getting $5.00 each a month and the third $20.00.

At Regina, a comparatively young institution, 23 lads were hired out and were earning from $5 to $20 a month.

For more detailed information regarding the various reserves and schools, I have the honour to refer you to the reports of superintendents, inspectors, agents and principals, as also to tabular statements attached to my report, since it does not appear what good end would be served by duplicating to any extent, through insertion here, what is contained in them.

PROVINCE OF ONTARIO.

While information as to general conditions has been received in summarized form, it may not be superfluous to add a little relative to affairs in the individual provinces.

Of course, no marked change can under ordinary circumstances be expected to take place with regard to the condition or progress within a year. While, therefore, what was said in last year's report about the want of energy and progress among Indians of the older provinces, as compared with those in the west, holds good, as a consequence of the depression in trade already herein referred to, the Indians of Ontario have, like others, been compelled to increased exertion in various pursuits, the effect of which can hardly fail to prove beneficial.

Somewhat increased activity has been observed in agricultural matters in certain directions, which, doubtless, is due to the fact that it becomes more difficult as time goes on for those who have been doing so to rely upon hunting as a means of maintenance.

In last year's report it was suggested that, subject to your approval, an experiment might be made in the way of introducing the system of close supervision and tuition which had worked so well in the North-west Territories. The Christian Island Band, on Georgian Bay, was selected as the most suitable within the province of Ontario for the intended experiment; but I regret to say that it has been necessary to defer making it, because I consider it of so great importance in itself and so essential to success to have it properly started that I desire to give the matter my personal attention, and, unfortunately, since the recent date at which funds for the purpose became available, my other engagements have been so many and so pressing that it has been quite impossible, so far, to visit the reserves with a view to putting the proposed scheme into operation; but it is intended to do this just as soon as time will permit.

INTRODUCTION OF SYSTEM TO REMEDY EXISTING OBJECTIONS TO ANNUAL DISTRIBUTION OF MONEYS.

What I regard as a very important measure is the introduction among the Six Nation Indians of a system by which the money distributed among them annually can, at any rate to some extent, be applied to much better advantage than in the past. It has always appeared to me very questionable whether more harm than good does not, as a rule, accrue to Indians from the receipt by them of moneys which do not represent any exertion on their own part. Apart from the pauperizing tendency, the distribution, in comparatively small sums, means that, in the majority of cases, the money is more or less frittered away, without any substantial benefits being conferred. In searching for a remedy and means to check this waste, the idea suggested itself that if young men starting out in life, or older ones who might desire to improve their condition, could secure such an amount at one time as could be invested in some substantial manner calculated to permanently improve their facilities for earning a livelihood, a considerable advance would have been made in a very desirable direction.

With the consent of the chiefs of the Six Nation tribe, a system has been introduced by which advances are made, to suitable applicants, from the funds of the band, in the shape of loans, on the recommendation of the council of the band. A lien is taken upon the property for which the Indian has been located and the department retains and puts to the credit of the band the amounts that would have otherwise been paid to the borrower, until the amount borrowed is repaid with interest; and thus, while the investment is a good and safe one for the band, a substantial benefit is conferred upon the individual.

This is regarded as the insertion of the thin end of the wedge into what is' without question, a very important and difficult matter to deal with; and it is hoped by degrees to be able to extend the operation of the principle, until much good shall have been accomplished.

QUEBEC.

In so far as can be noticed within the limits of a single year, there have been observed, at any rate among some of the Indians of this province, signs of a growing self-reliance. And what has already been said about the tendency of the conditions brought about by commercial depression to foster exertion and an independent spirit, applies more forcibly to these Indians, because they are more dependent for the market of their wares on the United States than are their brethren in the other provinces.

In places where the hunt has not failed to an extent to prove to the Indians the impossibility of relying upon it to furnish their maintenance, there is naturally manifested an inclination to neglect, in a degree, agricultural operations, but in others, where the failure of the chase has been more decided, greater interest has been manifested in husbandry.

In this province the educational facilities have, if anything, improved during the year; but it is regretted that no corresponding desire on the part of parents to vail themselves of their advantages for their children has been observed. To this

however, there is one bright exception, in the case of the Huron Band, where it has been found that young men are manifesting a good deal of anxiety to obtain such education as will fit them to take employment of various kinds among the whites, which bears out the contention that Indians will take interest in the education of their children just in proportion as they can recognize the results and the benefits accruing therefrom, which serves as a strong argument in favour of industrial training, which has been so strongly advocated.

NOVA SCOTIA.

In this province an increasing interest in agriculture has been observed—as also in the subject of education, and some advance in the matter of morality—and more particularly in the direction of temperance—appears to have been made.

Here there was a small falling off, to the extent of $133.00, as compared with the preceding year, in the amount of individual earnings, but, as already said in another connection, the smaller amount, no doubt, represents greater exertion.

Although no epidemic attacked the Indians, there seems to have been a good deal of sickness among them in parts of the province. However, that their struggle for existence has not been unduly severe is evidenced by the fact that there has been an increase of 23 in a population numbering now 2,164 souls.

PRINCE EDWARD ISLAND.

The Indian population of this province only aggregates some 287 souls; and such of them as have settled on their reserves are doing well, have good comfortable houses, cultivate 233 acres of land and give a good deal of attention to growing apples.

This year their individual earnings are shown to have increased from $200.00 to $6,100.00; but this has no particular significance, because this year, for the first time, the earnings from the various Indian manufactures have been shown. This is another point where it had been determined to introduce the system of close supervision under a farming instructor; but, for the same reasons given in connection with the Christian Island Reserve, the matter has had to be reluctantly deferred. On the whole, these Indians are fairly thrifty, progressive, moral and interested in religious and educational matters, and it is thought that the best results may reasonably be expected to accrue from the special over-sight and training which it is proposed to give them.

NEW BRUNSWICK.

In this province the Indians do not depend so much upon farming, but support themselves mainly by working at lumbering, stream-driving, fishing, trapping fur-bearing animals and by the sale of their usual manufactures.

Their earnings from these sources increased during the year by $1,275.00, and their population by 50 souls, notwithstanding that a constitutional predisposition, which they seem to have, to weakness of lungs, which, aggravated by the exposure more or less incidental to their manner of life and their occupations, develops into consumption, has produced a good deal of sickness among them.

BRITISH COLUMBIA.

PRECONCEIVED IDEAS ABOUT INDIANS CORRECTED BY VISITING.

As you are aware, it was my good fortune to visit, last summer, in company with the Premier and yourself, many of the villages and schools comprised in the agencies on Vancouver Island and the mainland of British Columbia, together with the agencies in the North-west Territories found on a tour along the line of railway from Calgary to Edmonton and then extending along a route covered by horse conveyance and following the course of the North Saskatchewan to Prince Albert, a distance of nearly 500 miles.

The preconceived ideas about the Indians visited in British Columbia were rapidly dispelled upon coming into contact with them, for they were found to be a people more or less independent of eleemosynary assistance from the government, not a few or the most energetic and thrifty possessing a fair share of the good things of this life, and among others particularly comfortable dwelling houses.

In fact many of them appeared to be in better circumstances than a large percentage of white settlers resident in the country. At Bella Bella, Metlakahtla, Alert Bay, Fort Simpson and Kincolith, houses, built after the most approved style of the whites, were found, owned by the Indians. Among these Indians is a growing desire to have the reserves subdivided so that each Indian may hold his farm in severalty; and several applications of such a nature were brought to us for arrangement, which is a clear indication of advancement in the direction of individualism.

TENURE OF RESERVES.

In connection with reserves within this province, the question of tenure of lands outside the Railway Belt has in the past been a more or less vexed one; and, as the matter now stands, it is open to question whether a surrender can be made for the purpose of selling or leasing for their own benefit, or whether an Indian desirous of taking advantage of the benefits of the Advancement Act could have lands apportioned to him in accordance with its provisions.

With a view to the final settlement of what is a very important matter, it is being submitted for an opinion to the Supreme Court.

Affairs generally throughout the province have progressed very satisfactorily during the year.

On the west coast the catch of fish and of fur seals has been good. Furs of all sorts have been fairly plentiful. Better prices for them have been obtained. Improvement has been noted in the methods of living—of sanitation—also increased activity in agricultural pursuits, a growth of friendly sentiments in quarters where reserve, if not suspicion, was entertained, also something like anxiety on the part of parents to obtain the benefits of the industrial institutions for their children.

THE NORTH-WEST TERRITORIES.

The progress made by these Indians in the direction of earning money towards their maintenance by the pursuit of various industries has already been mentioned, but does not necessarily imply any increasing proficiency in the arts upon the skill in which modern civilization, with its multifarious requirements, is so dependent.

PROGRESS TESTED BY COMPETITION AT THE TERRITORIAL FAIR.

No better opportunity of testing the result of the policy which has been pursued for the civilization of Indians in the North-west Territories, could have been had than that afforded by the Territorial Exhibition held last summer at Regina.

As I have already done with regard to the practical result of education at the industrial institutions, I cannot do better than quote an extract from the Assistant Commissioner's Report. He writes, *inter alia*, the following:—

"As proof of the great strides made by the Indians in the pursuit of civilization, I am pleased to be able to report the splendid success made by them in their varied exhibits at the Territorial Fair, held in Regina from 29th July to August 7th last. The improvement over the Indian exhibit at the World's Fair in 1893, was most marked. The exhibits were shown in a frame building, 50 by 25 feet, which was erected solely by the carpenter pupils of the Regina Industrial School, the work upon which was decidedly a credit to them.

"The exhibits were principally from the Moose Mountain, Crooked Lakes, Edmonton, Hobbema and Blackfoot Agencies, and from the Qu'Appelle, Battleford, Regina, High River, St. Albert, Elkhorn, Rupert's Land and St. Boniface Industrial Schools, as well as from several day and boarding schools, notably those of File Hills, Touchwood and Crowstand.

"These consisted of farm products, carpentry, blacksmithing, tailoring, harness, tinsmithing work, shoemaking and printing, lace work, embroidery, home-made furniture, also bread, butter, cheese, jam, soap, articles of clothing, knitting, wooden ox-collars, double-trees and single-trees, axe and fork handles made out of native wood and ironed by the Indians, horse-shoes, hinges, pincers and a great variety of other articles numbering, in all, about fifteen hundred specimens.

"It would take up too much space to repeat the praises bestowed upon the Indian exhibit by the visitors and the press generally; in fact until assured that the articles exhibited were actually the product of Indian labour, visitors were scarcely inclined to give credence thereto.

"That many of the Indian exhibits fully equalled, and in some cases excelled, the product of white competitors, is beyond doubt, and fully demonstrates the rapid advancement that is being made in civilized pursuits by our Indian population."

ESTABLISHMENT OF MILLS.

One thing which is making a marked improvement in the appearance and comfort of many of the reserves is the establishment of grist and saw mills in places where milling facilities were bad, and where much loss in time and kind consequently occurred. The great advantages of these mills are fully recognized by the Indians, who are very willing to contribute, in proportion to their means, to their establishment.

The knowledge that they thus get full returns for the grain they raise is a strong incentive to interest in agriculture, and the ease with which they can get the timber cut (under careful restrictions) and hauled to the mills by themselves, and converted into lumber, has greatly stimulated the construction of a better class of building.

The following are the mills in operation:—

Onion Lake Agency,	saw and grist	mill.		
Carlton	"	"	"	"
Hobbema	"	"	"	"
Saddle Lake	"	"	"	"
Crooked Lakes	"		"	"
Edmonton	"		"	"
Blood	"	"		"

At Hobbema there was no small amount of work required to secure water power wherewith to drive the mill. For a considerable distance a channel had to be cut from the river and a dam constructed, a work which would have taxed the energies of white men, all of which was done by the Indians themselves.

INTRODUCTION OF IRRIGATION WORKS.

Among matters of special interest and importance may be noticed the commencement made in the direction of irrigation works in Treaty 7.

The district within which the agencies in the treaty mentioned are situated is undoubtedly a splendid one for grazing purposes, but the liability to drought opposes a strong barrier to successful cultivation of farm produce, including hay; and to overcome this the settlers have been turning their attention to the subject of irrigation.

The first Indian experiment was made on the Blackfoot Reserve, where a main irrigation ditch, extending for a length of some seven miles, with some lateral extensions, has been constructed.

On the Piegan Reserve a main ditch, with auxiliary—the former 3 and the latter $1\frac{1}{2}$ miles in length—has been dug; and, on a smaller scale, an experiment has been made at the Blood Reserve. All these works have been carried out by the employment of Indian labour solely.

At the Blackfoot Reserve, where work was completed in time to test the effects, at any rate to some extent, during the last season, results have been achieved which augur well for the permanent success of the experiment and for the possibility of its profitable extension there and in other directions.

While much may be hoped for from irrigation, in no way will it prove of more benefit than in the direction of enabling a plentiful supply of hay to be raised. Without doubt, the western Indians will have to place their main reliance for their maintenance upon stock-raising. In this connection, it is gratifying to find them divesting themselves of their prejudice against cattle, and beginning to avail themselves of arrangements made by the department to enable them to dispose of their ponies in exchange for more profitable stock.

To show what progress is being made in the direction of inculcating habits of industry among the western Indians, not only the last taken into treaty but naturally the most warlike and disdainful of manual labour, it may be stated that, in a report recently received from the agent for the Blood Indians, he says that at almost every village on the reserve hay is to be found well stacked and nicely fenced.

During the past season these Indians have cured and stacked 1,362 tons of hay, which in that country represents no small amount of work, 781$\frac{3}{4}$ tons of which was put up under contract to supply neighbouring ranchers and others.

Some of them have been and still are busy mining coal, which they deliver under contract to furnish the requirements of the North-west Mounted Police posts in the district, as well as any other market that can be found.

For the month of September last, the individual earnings of this band from various sources amounted to $3,912.00.

Department of Indian Affairs.

MANITOBA.

In this province the large majority of the Indians depend almost entirely upon hunting and fishing for their support, in which, during the year, they met with fair success.

In such parts as farming is pursued, reports go to show that, in so far as their buildings and their cattle are concerned, the Indians were never better off than they have been during the year. Many new houses of a substantial character, and displaying signs of taste, have been erected.

With regard to cattle, the Indians in the agencies of Messrs. Martineau and Muckle have made gratifying progress, a good many of them owning fifty head or more.

The grain harvest has been exceptionally bountiful, and the health of the Indians good; so that, all considered, there is much cause for gratitude.

The work of the department steadily increases in magnitude and importance. The changes which are taking place in the environment of the Indians, as well as in their respective conditions, are much more rapid than ever before, necessitating promptitude in doing for them whatever is to be done.

The disbursements made through the department have during the past year amounted in the aggregate to $1,260,160.93, and I think it is not too much to say that the disbursement of this large sum has been made to the greatest advantage and for the great good of the country.

Notwithstanding the labour and perplexities connected with the administration of this department, one cannot but be profoundly interested in the work.

In conclusion, I beg to refer to the work done by the various branches of the department; but, before doing so, desire to point out that the effort of the department now is to avoid any correspondence beyond what is absolutely necessary, and with this object in view it has an understanding with its agents that they, instead of expecting a formal acknowledgment of routine communications made at regular intervals, may assume that the same have been received unless advised to the contrary, and in so far as possible the plan of making marginal notes or memoranda upon matters transferred by the outside officers, is adopted.

TECHNICAL BRANCH.

There are at present in this branch two officers, a surveyor and chief draughtsman and an assistant surveyor.

The surveyor in charge of this branch was also employed in outside work, retracing the outlines of the Caughnawaga Indian Reserve, during part of the months of August and September and part of October.

The assistant surveyor was engaged for four and a half months making important surveys in the North-west Territories for the department.

During the absence of these officers, the surveyor in charge of Indian reserve surveys for Keewatin and the North-west Territories was doing duty in this branch at Ottawa.

The following is a statement of the work done by this branch during the year ended 30th June, 1895.

Engineering.

Plans and tracings prepared	4
Reports made	16
Examinations made	24
Specifications drawn	1

Architecture.

Estimates	1
Specifications	2
Reports	13
Examinations	11
Drawings	6

Surveying.

Maps and plans drawn	29
Tracings and sketches made	134
Reports made	340
Examinations made	488
Instructions prepared	1
Copies made of field notes	23

Miscellaneous.

Areas and calculations	140
Descriptions	30
Memos	9
Estimates, &c	8

LAND AND TIMBER BRANCH.

The usual statement showing the Indian lands sold during the year will be found at page 317.

The work of the branch comprises the preparation and registration of surrenders of land to be disposed of for the benefit of the Indians; the sale of such land including the timber and minerals thereon; the examination, entry, registration and issue, as the case may be, of land returns, assignments of land, Crown grants, timber licenses, location tickets to individual Indians, leases and security bonds, settlers' licenses issued by agents to purchasers of land, and the collection of purchase money, dues and rents, also the protection of reserves from trespass, and adjustment of disputes among Indians as to lands, including those left under will or in cases of intestacy.

Under the provisions of the Land Regulations, there has been sold a quantity of land on the Saugeen Peninsula, in whole or for most part unfit for cultivation.

The Passpasschase Reserve, with the exception of a few sections which were sold by auction held in 1891 and 1893, respectively, was placed for sale in the hands of

the Dominion Lands Agent at Edmonton, and the greater part has now been disposed of—sales to the value of $24,347.75 having been made during the past year.

Since the survey of the Thousand Islands in 1874, the department, in the endeavour to dispose of them to the best advantage for the Indians, tried leasing and then selling with building conditions attached; but, as neither of the plans proved successful, it was decided to offer them for sale unhampered by conditions as to improvements, and the islands opposite the Townships of Leeds, Escott, Lansdowne and Yonge, in the County of Leeds, having been put on the market, sales to the value of $33,193.55 were effected during the year.

An effort has recently been made by the department to remove all white men from Indian reserves, resident thereon without authority, and a number of permits under the law have been granted to those entitled to consideration, while in other cases the parties have left the reserves.

It is regretted that neither of the two leading bands in Ontario—the Mohawks of the Bay of Quinté and the Six Nations of the Grand River—has taken advantage of the provisions of the Act to become regularly located on individual holdings on their reserves. However, land registers have been prepared which contain the names of the various Indian owners, with a description of the land held by each, which are found very serviceable, and it is hoped that eventually they will consent to come under the system of tenure by location ticket.

The town-plot of Bury, originally laid off at the head of the Saugeen Peninsula, has been reduced to a smaller area and the balance subdivided into farm lots, all of which have been placed in the agent's hands for sale.

The timber on the Wahnapitae and Temiscamingue Reserves has been regularly surrendered, and after examination by the Timber Inspector has been sold for the benefit of the Indians concerned.

CORRESPONDENCE BRANCH.

Since, in 1893, the method of conducting the work of this department was reorganized, each branch has, as a rule, prepared and written the letters pertaining to its own work.

It is obvious, however, that from the nature and extent of the department's business, there are always many matters presenting themselves which can not be considered to belong exclusively to any particular branch, and with its share of such the time of the Correspondence Branch is fully occupied.

Since matters outside of ordinary routine work commonly require a good deal of search, care and thought, the quantity of work done by this branch cannot be judged of by the numbers of letters prepared and written, which, however, it may be stated, have covered 2,618 foolscap pages of type-writing.

This branch, moreover, attends to the copying, into the letter books, of correspondence sent out by most of the other branches and to the despatch thereof, and the number of folios so treated aggregated 12,607 during the year.

REGISTRY BRANCH.

This branch has under its charge Indian records from the year 1723, relating to treaties made with the Indians, reports of conferences relative to changes of

reserves, various forms of tenure, claims of white men to Indian lands, about all of which discussion or dispute is constantly arising, necessitating ready access to records, some of which relate to very remote transactions.

During the year, a thorough search, involving a good deal of work, had to be made in connection with the cases under arbitration between the Dominion and Provincial Governments, as well as for records regarding the rights of way of railways in the older provinces.

Various opinions upon legal matters submitted to the Solicitor of Indian Affairs, since 1859—when the Deputy Minister of Justice was first appointed to act in that capacity—are being collected and copied to be indexed and bound for ready reference.

To facilitate access to comparatively recent correspondence, a special index of files for the past twenty years has been recently completed.

Record is kept of letters to which answers are required; and when the latter are not received within a reasonable time, notices are sent out calling attention to the omission.

Outgoing letters copied into the official letter books, to the number of 12,607, during the last year, have been indexed by the branch. That there has been a steady annual increase in the work of this branch is evidenced by the fact that since the Indian Department was formed the number of letters received has increased from 6,970 in that year to 26,063 during the past year, which number does not include formal acknowledgments of cheques nor memoranda which take the place of letters and have to be duly registered and indexed.

SCHOOL BRANCH.

Since the establishment of the School Branch, referred to in my annual report for 1894, the work has steadily increased owing to the closer departmental supervision of our schools called for under the new regime.

The following is a summary of the work performed in the branch during the past year:—

School returns received and checked from

Ontario	324
Quebec	75
Nova Scotia	31
New Brunswick	20
Prince Edward Island	4
British Columbia	87
Manitoba	205
North-west Territories	296
Outside Treaty	8
Total	1,050

Files received and acted upon	6,261
Folios of letter books filled	2,176
Inspectors' reports received	181
Public and Separate School Inspectors' reports	129
Departmental Inspectors, Manitoba and N.-W. Territories	52
Agents' reports received between January and July	1,129
Trade Instruction returns received	82
Admission and Discharge returns	142
Principals' reports received	59

The checking of returns and requisitions for school material takes up a good deal of time and requires close attention, and in addition this branch takes charge of all documents and files connected with its own work.

STATISTICS AND SUPPLY BRANCH.

This branch has dealt with 1,350 files during the year and made 756 requisitions on the Queen's Printer and the Superintendent of Stationery for printed matter, stationery and school material, for the supply of various superintendents, agents and schools.

This work involved no small amount of labour in the way of making memoranda, checking and writing letters of advice.

This branch furthermore examines and keeps a record of returns of elections of Indian chiefs and councillors, is charged with issuing blankets, clothing and other supplies required for infirm and destitute Indians, collects agricultural, industrial and census statistics, and compiles tabular statements therefrom, supervises returns of government property, issues departmental and other reports or documents to those requiring them, and makes all necessary requisitions on the Department of Public Works.

ACCOUNTANT'S BRANCH.

The following is a synopsis of the work done in this branch during the year ended the 30th June, 1895 :—

Number of files dealt with	9,990
Number of cheques issued	13,700
Number of covering letters for cheques	7,950
General correspondence, number of letters	4,300

The accounts are kept in four ledgers as follows :—

	No. of Accounts.	Expenditure.
Indian Trust Fund	295	$246,520 60
Appropriation Accounts.		
Manitoba and N.-W. Territories	315	761,105 22
Brititish Columbia and Maritime Provinces.	46	116,414 38
Ontario and Quebec Appropriation	18	77,884 17

Expenditure.	No. of Accounts.	Expenditure.
Accounts kept in subsidiary ledgers.		
In connection with loan of $40,000 to individuals of Mohawk Band of Bay of Quinté for purpose of fencing land	350	
With individual Indians who have deposited moneys with the department	450	

In addition to the above there was the following expenditure from the Civil Government Vote :—

Salaries	$ 50,556 77
Contingencies	7,679 79
Total expenditure	$1,260,160 93

The revenue of the Indian Trust Fund, exclusive of interest, amounted to $108,327.18.

The Auditor General has also been furnished with monthly statements of revenue and expenditure and the corresponding vouchers.

I have the honour to be, sir,
Your obedient servant,

HAYTER REED,
Deputy Superintendent General of Indian Affairs.

PART I.

OF THE

REPORT OF THE DEPARTMENT OF INDIAN AFFAIRS.

WESTERN SUPERINTENDENCY—2ND DIVISION,
MELBOURNE, 24th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my first annual report and tabular statement on the three bands of Indians within my agency for the year ended the 30th June, 1895.

Oneidas of the Thames.

This band numbers seven hundred and eighty-three, an increase of fifteen as compared with the previous year.

They live within the township of Delaware, in the county of Middlesex. The land on this reserve is well adapted for general farming, being composed of a rich clay and sand loam. The crops have been good with the exception of corn and potatoes, which suffered considerably by the continued drought. Fifty-four acres of new land was broken last spring. The agricultural society on this reserve holds a fair annually.

The Church of England and the Methodist Church of Canada have each a mission on this reserve. The Methodist body has now under construction a handsome brick church near the centre of the reserve. There are three schools on the reserve, which are kept open during the school year, and taught by white teachers. The attendance at school has not been good, partly owing to some families being away working for whites, but mostly through the neglect of the parents, who do not seem to appreciate the great privilege of education which is given them.

Chippewas of the Thames.

This band numbers four hundred and forty-three, an increase of three as compared with the report of last year. They live within the township of Caradoc in the county of Middlesex.

The land on this reserve is a clay loam, and well adapted to grow all kinds of grain and hay and the raising of farm stock, especially cattle and sheep. There is a considerable amount of the best of the land under swamps which are not yet drained. A good deal of draining has been done during the year. A good many of the old fields have been over-cropped.

About fifteen hundred rods of new fencing was built by the Indians last spring.

There has been an increase in the production of all kinds of grain, of three thousand eight hundred and seventy-two bushels as compared with last year. There is also an increase of twenty-four in the number of sheep; there is also an increase of horses and cows.

The agricultural society held their annual fair in October last. They had a fine display of farm stock, grain, roots and vegetables. A good deal of work has been done on the roads during the year.

The Church of England and the Methodist Church have each a mission on this reserve.

The Mount Elgin Institute and Industrial Farm are situated near the east corner of the reserve on the banks of the River Thames. The new building at this institute is now in course of construction, and when completed will greatly add to the comfort of the pupils.

There are three schools on the reserve, which are kept open during the school year. They are taught by one Indian and two white teachers. The attendance has not been satisfactory, owing to the carelessness of the parents.

Munceys of the Thames.

This band numbers one hundred and twenty-two, a decrease of seven.

They occupy a portion of the Caradoc Reserve along with the Chippewa Band.

The soil on their portion of the reserve is about the same as that occupied by the Chippewas, only it is more broken with creeks. The fertility of some of the old land has been greatly reduced from want of proper culture, and being over-cropped. The best of their soil is not yet properly drained. There was seventeen acres of new land broken last spring. Their farm stock has increased considerably as compared with last year. There is also an increase in the number of agricultural implements.

There is one school on this reserve. It is taught by a white teacher.

The Church of England and the Methodist Church have missions on this reserve, and are doing a good work on this as well as other reserves under my care.

The medical attendant has vaccinated quite a number of the Indians on the Caradoc Reserve during the year.

The general health of the Indians has been good.

Before closing this report I have to bear testimony to the zeal and fidelity of my predecessor (the late Thomas Gordon) in the discharge of his duties whilst in charge of this agency.

I have the honour to be, sir,
Your obedient servant,
A. S. McDOUGALL,
Indian Agent.

INDIAN OFFICE,
BRANTFORD, ONT., 28th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report and tabular statement on the Six Nations Reserve of the Grand River for the year ended 30th June, 1895.

The crops for the past year were generally good, wheat and oats being an unusually heavy crop, while pease were a very light crop ; potatoes almost a failure in clay soil, on account of the long drought, but much better in sandy soil.

The usual contracts for building and repairing bridges on the reserve were satisfactorily completed by the contractors, all of whom were members of the band.

The reserve suffered greatly by fires in several bushes in the month of August, 1894. One of its best bushes suffered greatly, a number of its largest trees having been destroyed. With the aid of a number of teams and men hauling water some distance, the fire was, after unceasing efforts, controlled.

The road work under the direction of forty-three pathmasters, who are appointed annually, was well attended to, and the roads kept in good condition.

The fire losses were unusually few during the year. The band pays one-third of the loss, which is assessed by two fire inspectors, as required by the fire regulations of the reserve. This amounts to an insurance.

The agricultural society of the reserve, wholly under Indian management, held its annual fair in October last, which was very largely attended during the two last days. The society is in a most prosperous condition.

The Farmers' Institute of the South Riding of the County of Brant held a public meeting on the reserve in February last, when a number of Indians became members.

The affairs of the Six Nations are managed by hereditary chiefs, who are anxious to encourage their members to remain on the reserve and cultivate their land in a proper and husbandlike manner, and have passed rules and regulations, which have been approved of by the Department of Indian Affairs, by which certain amounts will be advanced from their capital money to aid individual members to erect proper buildings on their land. The amounts advanced are repayable in annual payments to suit the borrower. Although these advances have only been made a short time, a marked improvement in buildings can readily be observed.

The education on the reserve is given great attention. The school boards are doing all in their power to encourage education. Large amounts were expended during the past year in placing all the board schools in first-class condition.

Great interest is manifested by the Indians in church and Sunday school work.

The twentieth annual ploughing match of the Six Nations was held in November last, under the auspices of the agricultural society. The chiefs in council voted the sum of seventy dollars toward the same. None but Indians can compete. There was a very large attendance and great interest taken. The Indians generally are good ploughmen, and at the Wentworth ploughing match, which took place on the Hamilton asylum farm last November, a number of prizes were taken by Indians of this reserve.

The health of the reserve was generally good during the first two and last quarters, but during the March quarter the long and severe winter was very trying to the old and feeble and fatal to many advanced cases of consumption, and in consequence the death rate was rather high.

The census taken the past spring shows three thousand six hundred and twenty-nine members, being an increase of seventy-two over the previous year.

I have the honour to be, sir,

Your obedient servant,

E. D. CAMERON,

Superintendent.

PENETANGUISHENE AGENCY,

20th August, 1895.

The Honourable

The Superintendent General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement on Indian affairs in my agency for the year ended 30th June, 1895.

This band is known as the Chippewas of Beausoleil, the band having formerly lived there, but now only a few families live on this island, the majority having removed to Christian Island some years ago, where the soil is much more fertile. A few of the Indians residing on Christian Island have taken to farming and are

making fair progress, but I hope to see better results in the future, as they are beginning to realize that this is the surest way of making a livelihood. The crops last year were very poor.

The Indians living on Beausoleil Island subsist principally by fishing and hunting, game being plentiful, quite close to this island.

The health of the band has been good.

The school is conducted under the auspices of the Methodist Missionary Society, the teacher last year being the Rev. Jno. Laurence, whom I found to be a very efficient and painstaking official; but I find great difficulty in inducing the parents to send their children regularly to school; but even with this to contend with, the progress was very good indeed.

In winter the Indians take out large quantities of cordwood, which they sell to the steamboat companies. This assists them very much.

I have the honour to be, sir,
Your obedient servant,

CHAS. McGIBBON,
Indian Agent.

ATHERLEY AGENCY,
ATHERLEY, 24th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report and tabular statement showing the condition and progress of the Indians under my supervision during the year ended 30th June, 1895.

Rama Band.

The population is now two hundred and twenty-nine, an increase of one since my last census, the result of seven deaths, six births and two immigrations. The health of the band has been excellent during the year. Sanitary measures receive prompt attention; on the approach of spring all garbage is removed from the yards and premises surrounding their dwellings. There has been no contagious disease among these Indians notwithstanding the fact that scarlet fever and diphtheria have existed to an alarming extent in the town of Orillia, village of Atherley and surrounding vicinity. I am pleased to be able to state that in agriculture some of them are making decided progress. The crops this year are abundant and in excess of any former year. The land on this reserve is excellent and well adapted for agricultural purposes. The band have adopted a very intelligent system of road making on the reserve, similar to that under municipal law. I give them all the encouragement I can along this line, and this year considerable work has been done. The school is doing good work; it is fairly attended, and favourable progress is made by the pupils who attend regularly. It has been under the charge of Rev. J. Egan, missionary. The whisky evil still prevails at Rama. The close proximity of this reserve to Orillia is detrimental in this particular, the Indians are frequently there; and, if liquor cannot be obtained directly from the hotel-keeper they will secure the assistance of unprincipled white men to purchase it for them. I hope ere long to be able to give some of this class a wholesome lesson.

Georgina and Snake Island Band.

This band numbers one hundred and eighteen, a decrease of four since the last census, the result of four deaths.

Georgina Island, where the greatest number of this band reside, is a very healthy situation. The sanitary condition is good. Quite a number of this band take a decided interest in agriculture. The produce of last year was good, and the present year promises better results. As a class the Indians of this reserve are sober, well conducted and industrious. A case of drunkenness is very rare. Chief Big-canoe, who was re-elected in June last, is an excellent man as chief. His example and influence among his people is good. In addition to farming he gives considerable attention to the cultivation of bees; it has become a very profitable industry with him; he has at present eighteen hives.

The church and school premises are much improved in appearance by the erection of a neat picket and board fence. The roads are kept in good condition. Mr. Mays, the school teacher, is very diligent in the discharge of his duties, not only striving to advance his pupils in the general branches taught, but in habits of cleanliness and morality. The families that reside on Snake Island are very comfortable; their gardens and premises are well kept.

I have the honour to be, sir,
Your obedient servant,

D. J. McPHEE,
Indian Agent.

COUNTY OF RENFREW, GOLDEN LAKE AGENCY,
SOUTH ALGONA, ONT., 26th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended 30th June, 1895.

The Indians of my agency are enjoying very good health, and are able to support themselves well between farming and hunting, with the exception of four families who are very old and unable to work.

I have the honour to be, sir,
Your obedient servant,

E. BENNETT,
Indian Agent.

PARRY SOUND, ONT., 23rd August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report and tabular statement, showing the condition and progress of the various Indian bands in this superintendency for the year ended the 30th June last.

Parry Island Band.

This band still occupies its usually favourable position. During the year the crops were satisfactory and there was no scarcity. Those who desire it find an abundance of well-paid labour in loading vessels at the adjacent lumber docks, while the industrious female portion of the band earn a considerable amount by the manufacture and sale of Indian fancy work and baskets.

During the year a few changes have occurred in the population by births and deaths, the latter chiefly among the children of the band. These, however, have balanced each other, and the numerical strength remains exactly the same as last year.

I regret to have to report that the attendance at the schools has not been as good or as regular as could have been wished. Those pupils who attended properly made decided progress, as has been shown by the samples of their work sent by me to the department.

During the present season a fair amount of new land has been brought under cultivation and a larger area than ever before is now under crop. Consequently I feel justified in reporting that steady and sure progress is being made by this band.

Shawanaga Band.

This band had at the time of my visit made its usual annual migration from its reserve to the fishing village always occupied by it during the fruit-gathering portion of the summer.

As I drove through the part usually occupied I noticed that a larger number of fences had been erected, but the crops were evidently suffering from the prevailing dry weather. I fear, consequently, that there will be some suffering during the coming winter unless sufficient rain falls shortly. The band has, however, a good chance to supplement shortage of crops by earnings from fishing, so that if they will only exert themselves the distress need not be great.

It is much to be regretted that fire has run through the reserve of this band during the present season, and unless the timber on the unsurrendered portion is yielded to the department and sold so as to be cut during the coming winter, considerable loss will result.

Here as elsewhere the school question causes anxiety and depression. There have been two changes of teachers, and, though the attendance has been fair, it has not been as good as it should have been. I am under instructions to engage a new teacher for next quarter, when it is to be hoped that better results will follow.

Henvey Inlet Band.

My annual annuity visit to this band has not been characterized by any incident worth special note. All were happy and contented and seemed to be making some slow progress. I walked over a larger portion of the reserve than usual and noted the increase of new land brought under cultivation. The agriculture was, I am sorry to say, of a rough rudimentary character. A clearing in the bush in most cases was simply ploughed up in which corn or potatoes were dropped and slightly covered. The seed thus sown had been subsequently left to take care of itself and the patches were left unfenced. It is therefore not to be wondered at that with the dry season the crops on the new land look anything but promising.

The lands in closer proximity to the village were however better fenced than ever before, and I noticed that, although there will be almost no hay crop this season, there are large meadows of wild grass in the neighbourhood which, if cut, will support the stock during the coming winter.

The election to the office of chief took place, when James Wickemanchie was placed in the position rendered vacant by the resignation of the late chief.

The members of this band are in very good health and both the men and women very well dressed. Consequently it is reasonable to judge that all are in a prosperous condition.

Nipissing Band.

This band is in a decidedly prosperous condition and any one visiting these Indians when assembled on a holiday or pay-day could not fail to notice that they are a fine lot of people, well dressed, well nourished, with energy depicted on the counten

ances of most of them. The chase is being abandoned by most of the younger men of the band and they take to the more profitable work of the lumber woods. A few only seem to take kindly to agriculture and still fewer to fishing.

Nothing of importance has transpired in this band during the past year. A few deaths have occurred among the juveniles, but these have been more than offset by a considerable birth rate.

The progress of the school has not been at all good; but, as a new teacher has been engaged, there is a reasonable prospect of improvement.

Dokis Band.

For some unknown reason this band failed to meet me on the appointed day, and as they chiefly reside on the Nipissing Reserve and not on their own, the general prosperity of that band pertains to this one also. The few members that I met seemed well and in a satisfactory condition, and were evidently bent on following the occupation of lumbermen.

Temogamingue Band.

This band, inhabiting the shores and vicinity of the large and picturesque lake from which it takes its name, was visited by me on the 18th instant and found to be in a condition that may be considered fair with, however, a suspicion of retrogression. It excites wonder that the individual members of the band present such a comfortable appearance when it is so evident that little of anything is raised from the soil, while hunting yields yearly but an average of $30 per head and there exists an absence of all other employment except that of guides to occasional parties of tourists who have succeeded in penetrating even to Lake Temogamingue.

The chief want of the band is a defined reserve, so that they may be able to concentrate their efforts within a certain area and cease to settle aimlessly on isolated spots far from the reach of mutual assistance.

Gibson Band.

This band, which I visited in May last and which I propose to visit again shortly, I found to be in an unusually harmonious, satisfactory and prosperous condition, and there seemed every prospect of such a state of affairs continuing, for a time at least.

The school matters showed some signs of improvement, though there is still much to be desired.

I have the honour to be, sir,
Your obedient servant,

THOS. S. WALTON,
Indian Superintendent.

WESTERN SUPERINTENDENCY—1ST DIVISION,
SARNIA, 22nd August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my tabular statement and annual report for the year ended June 30th, 1895.

The Chippewas of Sarnia Reserve have been making very fair progress in their farming operations this last year. They have been adding to their stock of agricultural implements, and also in fencing, as they have put up, I may say, miles of barbed wire fence during the past year.

They had a larger acreage under crop this year than they have ever had before, and I am pleased to report that the crops are all good with the exception of hay: it is very light.

The school on this reserve has been taught by Miss Welsh, and the progress of the pupils has been satisfactory, and the attendance very fair.

The health of the Indians on the reserve is good at the present time, but as will be seen by my tabular statement there has been a decrease of five in the last year, chiefly by consumption, and I find on looking back over my pay-list that there has been a decrease of forty-two in the last twelve years, so there appears to be a constant decrease year by year. The Chippewas living on Kettle Point and Aux Sables Reserves have not progressed as those on Sarnia Reserve. Their land is equally as fertile as that on Sarnia Reserve; the ditch which was cut last fall has been of great benefit to that reserve. The school on Kettle Point Reserve is taught by Miss Little. The progress in that school has not been very satisfactory, as the attendance has not been regular. The school on the Aux Sables Reserve is taught by Miss Vance, and the attendance is fairly good and progress has been quite marked.

The Pottawattamies living on Aux Sables Reserve have no claim on the reserve or moneys, and they do not make any progress.

I have the honour to remain, sir,
Your obedient servant,

A. ENGLISH,
Indian Agent.

NORTHERN SUPERINTENDENCY—4TH DIVISION,
PORT ARTHUR, 31st August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement on Indian affairs in my agency for the year ended 30th June, 1895.

The Fort William Band

numbers three hundred and seventy-seven, an increase of ten over last year. As may be seen on reference to my reports for the last twelve years, these Indians have been steadily improving; and, with the exception of about twenty stragglers who are located about Dog Lake and live by the chase, they are comfortably settled on farms on the reserve, have good whitewashed houses and barns, with clean yards and tidy premises, are possessed of cows and young cattle, and a team of oxen or horses to each family. Plenty of timothy hay, and a large quantity of root crops, such as turnips, potatoes, &c., are grown, and a good supply of trout and whitefish is secured from Lake Superior every fall. They all live very comfortably and some of the most frugal have money in the savings bank, and afford examples of thrift to not a few of their white neighbors. The reputation of the Fort William Indians for honesty stands high. They are careful in the performance of their public duties. Each male of twenty-one years and over does two days' work every year on the roads, and a duly appointed fence-viewer sees to the fences being kept in order. They have two good schools, one in the village on the reserve for girls and boys, and St. Joseph's Orphanage at Fort William for girls. The orphanage classes are conducted by the Sisters of St. Joseph, who are most competent teachers, and have met with much success in the training of Indian children.

Unfortunately the orphanage was burned last April, but the orphan children escaped most providentially with only the loss of their clothing. The Roman Catholic church was also destroyed by fire at the same time. The orphanage is

being re-built at a cost of $8,000, and will be ready for occupation this autumn, when the church will also be replaced.

Dr. Smellie gives careful attention to the duties of his position as physician to the band. During the year there has been but little sickness.

The Red Rock Band

numbers two hundred and five, an increase of two over last year. These Indians have settled in greater numbers on their reserve during the past than in any former year, and they are giving more attention to agriculture, in consequence of the growing scarcity of fur-bearing animals. Several have good crops of potatoes, and there is plenty of fish to be had conveniently in Lake Helen. The reserve is situated on the bank of the renowned Nepigon River, as famed for its large speckled trout as for its picturesque scenery. This river is visited by tourists yearly from the principal cities in the United States and Canada, and from different parts of Europe, who give remunerative employment to the Indians during the summer season. This, together with what they procure by farming and by the chase, enables them to live very comfortably. They have a well attended school, conducted by a good teacher.

The English Church Mission Reserve

is beautifully situated on the banks of Nepigon Lake, near the mouth of the Nepigon River. These Indians are a portion of the Red Rock Band. The land occupied by them is mostly fertile, producing the finest potatoes and other root crops, and a superior quality of wheat and oats. Samples of the roots and grain have been exhibited by me for nine years at the Port Artur Agricultural Fair, and have been highly praised. They have fine timber land, and the finest of trout and whitefish can be caught at their door the year round; they have a good bull and harness; plough, harrows, and other tools; a good cow, some young stock, and good pigs. Their houses are comfortable, and their church would do credit to a city. This, I may say, is one of the best reserves in my agency; and the Indians upon it are intelligent, industrious, and well-to-do.

The Pays Plat Band

numbers fifty-seven. This reservation is situated on the Pays Plat River, six miles from Rossport, on the Canadian Pacific Railway, where a large fresh fish business is done, tons being shipped on ice weekly. The Indians of this band have good sailboats and nets, and make about $100 a month from their fishing. They have also farms, and grow their potatoes, and hay to feed their cow and young stock as well as the bull that does their ploughing and other work.

The Hudson Bay Company have a small trading post on the reserve, kept by an Indian of the band, and the amount realized by the Indians from furs secured during the winter and sold to the company averages $1,200 a year.

They have a good school, well attended, and conducted by a competent teacher. They are well-to-do and industrious, and are at present engaged in building a church on the reserve.

The Pic Band

numbers two hundred and fifty-two, an increase of four over last year. In my last annual report I gave a retrospective glance at this and the other bands in my agency; and the only change I have to note is that this year they have purchased a span of horses for the use of the band, as they found oxen too slow for the work on their several farms, and considerably behind the times. They have a debt on their horses and harness of $75. This will be paid from the sale of the beef of the oxen they intend killing this fall. They also have a cow and young stock and poultry, a good crop of potatoes and other roots, and are altogether a sober and well-to-do people.

About 15,000 cords of spruce pulp wood were taken out last winter on the Pic River by Hazlewood & Whalen, an enterprising firm of Port Arthur, whose lumbering operations left in this part of the country about $37,500. The Indians secured employment in cutting, driving and shipping the timber, and their earnings assisted them to finish five frame houses which they commenced last year, and to make other improvements.

They have a good school, well attended, and Mrs. F. H. McKay, the teacher, is most efficient.

The Long Lake Band

numbers three hundred and thirty-six, being a decrease of five since last year. These Indians are all hunters and live by the chase. The reserve is situated so near the height of land that the climate is cold and the soil unfit for agriculture. They have a few warm spots of black loam land. They commenced to cultivate successfully only two years ago, and find they can raise potatoes and turnips. This year they have about six hundred bushels of potatoes, and three hundred of turnips, which is so encouraging that many others will be induced to plant these roots. Heretofore they have lived exclusively in wigwams; but several have commenced to build houses at their potato and turnip ground. This summer, like the past, about thirty-five men are employed carrying inland goods for the Hudson's Bay Company and the earnings from this work assist the band in making a livelihood. There are about thirty-five widows, heads of families, who are good hunters, many of them better than some of the men. Their hunts bring in from $300 to $700 per winter.

These Indians deal entirely with the Hudson's Bay Company, and are better off than those of other bands who deal with outside traders, and are better cared for when misfortune happens them. For example, about forty of this band had influenza this summer; and Mr. P. Godchene, the officer in charge of the Hudson's Bay Post, sent me word to bring in medicine for them from Dr. Pringle, of the Canadian Pacific Railway, which I did, much to their relief. Outside traders would not have taken this interest, for they take what they can get from the Indians, and leave them to care for themselves.

The Nepigon Band

numbers, according to this year's census, five hundred and twenty-nine, a decrease since last year of eight persons; but as I did not meet several families this year, there may really be an increase. These Indians, like the Long Lake Band, live by the chase. One hundred and eighteen live in wigwams and nine in houses. The latter have good gardens of potatoes, which, with the fall fish catches and their hunt, assists them in living more comfortably than the others. Many of the other Indians are beginning to see this, and will commence growing roots.

Several members of this band, as well as the Indians of the Red Rock Band, get employment from the tourists and sportsmen who frequent the Nepigon River for fly fishing. Lake Nepigon is the breeding ground which furnishes this river and the many others flowing into Lake Superior.

They have a well attended school on Jackfish Island, conducted by a good teacher.

I have the honour to be, sir,
Your obedient servant,

J. P. DONNELLY,
Indian Agent.

Department of Indian Affairs

ROSENEATH AGENCY,
ROSENEATH, ONT., AUGUST 13th, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—Inclosed herewith find tabular statement in connection with the Mississagua Indians of Alnwick, Rice Lake, and Chemong Lake, for the year ended 30th June, 1895.

Mississaguas of Alnwick.

The sanitary condition of the members of the band is at present excellent. I know of only one case of sickness. There were ten births, one immigration by marriage, and ten deaths during the year. Several of the Indians are working their holdings, and are doing fairly well by way of purchasing farming implements, horses, wagons, buggies, &c. I regret to say that in general they cannot be induced to save their seed grain; they sell it in the fall of the year, then have to purchase it in the spring at a much advanced price, to say nothing about the trouble and loss of time in replacing it. I am pleased to say that there is one marked exception in the person of Robert Franklin, who is, I think, the model farmer in the band. It will be seen by looking at my tabular statement herewith that little is made by the members by fishing and hunting, and but few of them attempt to make anything in this way, but rely on farming and hiring to others.

The school was taught during the year by Miss A. G. Willard. The attendance on the whole was good; and I think the children made fair progress.

At the recent election for chief Mr. Peter Crowe was the successful candidate.

Mississaguas of Rice Lake.

The sanitary condition of the members of this band at present is excellent, there being not one case of sickness. There were two births, two deaths, one immigration and one emigration during the year. Many of the members are working their own lands and are doing fairly well. The members, both men and women, as a rule are industrious, clean, tidy, and orderly. They make but little by fishing and trapping, but devote their time chiefly to farming, &c.

The school was taught during the year by Mr. J. P. Windsor, and I think the children have made fair progress, as he is a painstaking teacher.

Mississaguas of Chemong Lake.

The sanitary condition of the band is good, there being but one case of sickness at present. There were three births and three deaths during the year. The people are fairly industrious and as a rule well behaved. Several new frame houses were built during the year, adding much to the comfort of the occupants and the general appearance of the village. There are only about 525 acres cleared on this reserve, consequently the Indians do not do much at farming, but devote a good deal of their time to fishing, hunting, &c., and the young men working for farmers, in the lumber woods and river driving.

The school is under the New England Company, and is taught by Mr. A. Kennedy, their agent there. It is fairly well attended, and I think the children are doing well, especially those who can be induced to attend regularly; Mr. Kennedy is an efficient and painstaking teacher.

I have the honour to be, sir,
Your obedient servant,

JOHN THACKERAY,
Indian Agent.

SCUGOG AGENCY,
PORT PERRY, 26th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report for the year ended 30th June, 1895.

Since my last report, there have been one death and one birth in the band, leaving the number the same as reported last year, thirty-seven. There are several children and young people whose home is with their relatives on the reserve but who are not identified as members of the band, and consequently do not participate in the distribution of interest moneys.

There has been no contagious disease, and very little sickness of any kind during the year. Sanitary matters are fairly well looked after; the people are quite tidy and respectable in appearance, and their houses very well kept.

This reserve comprises eight hundred acres of land, of excellent quality, four hundred acres being leased, having been surrendered for that purpose, the remaining four hundred acres is occupied by the band, about three hundred and seventy-five of which is cleared, and only about one hundred acres under crop. Very few have much taste for farming, the new chief, Isaac Johnson, is, perhaps, the most progressive in this respect, and does what he can, with the agent, to encourage the others to a more extended and better system of agriculture. A former and quite reasonable excuse has been removed, by fencing a large portion of the reserve: the original fences having decayed and become worthless, the band determined on having a new fence, and in council passed a resolution to appropriate a sufficient amount from their funds to build about eight hundred and fifty rods, the fence is built of posts set twelve feet apart, with five barbed wires, and a cedar pole spiked on top of the posts, this makes a strong and durable fence. The Indians were quite enthusiastic about the fence, and most of them, who were able, worked like Trojans until the work was completed.

We have endeavoured to impress upon the minds of the parents the necessity of a better education for the children, and whereas only two were reported as attending school last year, there are six attending the public school in close proximity to the reserve this summer.

I am pleased further to report that the band now has religious service every Sunday, instead of every three weeks, as had been the case for several years past.

I have the honour to be, sir,
Your obedient servant,

WM. BATEMAN,
Indian Agent.

HASTINGS COUNTY, TYENDINAGA RESERVE,
DESERONTO, 10th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report in duplicate and tabular statement on the Bay of Quinté Reserve for the year ended 30th June, 1895.

At the expiration of the term of the last lease many of the Indians returned to their farms, and in every case have done well, and are equally as good farmers as many of the white tenants.

The long spell of dry weather was very discouraging for a time, but the grain and root crops have turned out really good, in every case a half better than last year.

The heavy rains in the latter part of July saved late grain and renewed the pasture.

Steady improvement in the buildings and fences is being made.

The wire fences are not a success on low marshy grounds, as the frosts heave out the posts every three or four years, but in high ground they are first class.

We have expended about two hundred dollars on our roads in putting on broken stone and gravel, and they are beginning to show the first-class work being done.

Many of the Indians do a splendid trade in gardening and dairy business, especially in butter, as, except in very few cases, they do not attend market, but have regular customers, who take all their butter and eggs.

The Indians do a good deal of fishing, and can dispose of their catch at good prices.

Considerable trapping is done for muskrat and mink.

A good many of the young men who do not own farms work among the farmers, and others are in the employ of the Rathbun Company; some are making bricks, and in the match factory, in the sash and blind works, in the lumber yards, driving teams, or in the lumber camps, but all are busy and industrious.

As a rule the children attend the four schools upon our reserve fairly well, and those who are regular make marked advances and get along better than white children.

There are services in the two churches and school house missions every Sunday.

There is a fair improvement in the sobriety of the members of the band, considering the chances they have for obtaining liquor through a class of low white men.

Andrew Maracle is doing well with his steam threshing machine, employing Indian help only, and has become very popular with the white tenants as well as with farmers outside of the reserve.

The churchwardens of Christ Church, Wm. and Joe Maracle, have built a wire fence about the church and graveyard out of the proceeds of picnics and special subscriptions.

Except a slight epidemic of measles, there has been no contagious disease. There have been a few cases of la grippe.

The sanitary condition of the reserve is excellent.

I have the honour to be, sir,
Your obedient servant,

W. GEO. EGAR,
Indian Agent.

WALPOLE ISLAND AGENCY,
WALLACEBURG, ONT., 19th August, 1895.

To the Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report and tabular statement on the Chippewas and Pottawattamies of Walpole Island, for the year ended 30th June, 1895.

With regard to farming operations on the Walpole Island Reserve for the year 1895, which is the most important of all operations so far as the prosperity of these Indians is concerned, I beg to report that the harvest just finished, of all kinds of grain, is fully up to the average of the last five years.

The corn crop, which is well advanced, promises to be the largest ever raised on the reserve. The potatoes and other root crops, notwithstanding the very dry weather, promise well, and, everything considered, there is not much to complain about.

To those who have depended upon the land there is an abundant promise of plenty to live on during the winter, and most of them will have something to sell.

The census taken in the month of July shows that the Chippewas have nearly (not quite) held their own in point of number. In taking this census much time was spent in advising and pointing out the advantages of farming exclusively for a living. The number of bushels raised this year is not quite as large as that of last year.

The Potawattamies have not so nearly held their own in point of numbers, they being four short of last year's census, but they have increased their total number of bushels to the extent of 2,591 over the quantity raised and reported in the census of 1894, and by present appearances they will have more this year than they ever had.

We have had built and put in place two substantial new ferries this year—one across the Chematagan Channel between Walpole and Squirrel Islands and one across the Chenail Ecarté between the mainland and Walpole Island, both of which are free to the Indians belonging to the two bands, and they are giving the greatest satisfaction.

The general health of the Indians has been very good—no epidemics. A good many of the old people have died during the year from old age, but more of the young people are growing up to manhood and womanhood than formerly, and the small decrease in numbers is nearly accounted for by death among the old people.

The schools have all been regularly kept during the year; the attendance of pupils is getting to be more regular and there is an education within reach of all.

There are about the usual number of the more advanced pupils attending the Shingwauk Home and the Mount Elgin Institute, who, from accounts received with regard to them, are making good progress.

The teachers of the three schools are all Walpole Island boys, educated at Shingwauk and Mount Elgin Institutes, and are giving good satisfaction. The Inspector of schools for the county of Lambton visits the schools regularly and speaks very favourably of the teachers.

The school houses are all in good repair, are kept clean and comfortable and will compare favourably with any other country schools.

It may seem from the general tone of my report that there can not be much to improve here, yet there are many things that I could wish otherwise.

Hoping that by perseverance and a desire to improve the condition of these people I shall perhaps be able to overcome most, if not all, the obstacles which stand in the way of their well doing,

I have the honour to be, sir,
Your obedient servant,
ALEX. McKELVEY,
Indian Agent.

CAPE CROKER AGENCY, ONT., 15th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement on Indian affairs for the year ended 30th June, 1895.

The population of this band now numbers three hundred and ninety-two persons, being a decrease of two this last year. The extreme cold of last winter was very severe on those suffering from consumption and kindred diseases. Several deaths were the result.

The sanitary condition of these people is fairly good, most of their dwellings are clean and comfortable and several improvements have been made lately.

Last season the grain and root crops yielded good returns to those who devoted their attention to agriculture. Hay was scarce and far below an average crop, but on the whole the agricultural pursuits were satisfactory.

The fall fishing last year was good, and several of the Indians here availed themselves of this opportunity and realized considerable money for their labours.

The schools on this reserve were open the full year, and were presided over by an efficient staff of teachers. The pupils who attend regularly are making good progress in their studies.

I have the honour to be, sir,
Your obedient servant,

J. W. JERMYN,
Indian Agent.

WESTERN SUPERINTENDENCY—3RD DIVISION.
HIGHGATE, ONT., 17th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report and tabular statement on the condition and progress made by the Indians of the Moravian Band of the Thames for the year ended the 30th June, 1895.

The population of this band is three hundred and four. There have been ten deaths since my last report, and during the same period there have been ten births, leaving the population the same as it was on the date of my last report.

Crops have been fair. There has been an increase in the number of bushels of oats and wheat over last year, and a decrease in the number of bushels of corn and potatoes. Barley and rye are not grown on this reserve. Field beans are a first-class crop and are extensively cultivated.

Several new houses have been erected since my last report and others are in course of erection.

Visible improvements have been made in the fences on the reserve during the past year. Old fences have been repaired, rods of new fence built, new land fenced in, and altogether these improvements have added greatly to the tidy appearance of the reserve.

We have two schools. They have a good regular attendance of pupils; they are well managed by good and efficient teachers. The pupils are improving fairly well; as a general rule, they are intelligent and obedient to their teachers.

We have three churches, Moravian, Methodist and English Church, all doing good work.

Under the direction of the department a new drain four hundred and eighty rods long has been constructed almost through the centre of the reserve. This was much needed, and from the acres of land in low, swampy bottoms now fit to cultivate, it is a grand improvement indeed.

The agricultural society's fall fair, held in October last, was another success. In fact the fair has become one of the best paying institutions in Ontario. The society has first-class grounds and buildings, all paid for, and some five hundred dollars in cash on hand after paying all prizes and expenses of the fair. The exhibits become more numerous and of better quality every year. In this respect there is no doubt the fair has been a great benefit to the Indians.

I have the honour to be, sir,
Your obedient servant,

JOHN BEATTIE,
Indian Agent.

SAUGEEN AGENCY,
CHIPPEWA HILL, ONT., 28th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my tabular statement in connection with the Chippewa Band of Saugeen for the year ended 30th June, 1895.

The population numbers 378, an increase of three since last year.

The Indians have enjoyed fairly good health during the past year, and appear happy and contented.

A number have taken to the manufacture of rustic tables and chairs, which meet with a ready sale through the neighbourhood.

The women of the band find quite a sale for fancy baskets, moccasins, etc., from the summer visitors at Southampton.

Their crops were sown late and the continuous dry weather has been very hard on them.

The three schools on the reserve are being very well attended.

Chief Madwayosh has erected a handsome white brick house, which is much admired by visitors passing through the reserve.

The brass band received first prize in a competition at Wiarton recently, and receives many engagements throughout the surrounding country. The players own the instruments, having bought and almost paid for the same themselves.

Fire did great damage through the bush last season, but the Indians are taking out all the wood or timber that is saleable.

They hold in great respect those who have good buildings or crops. Their horses are gradually becoming better and more serviceable for farming purposes. They also take great pride in showing outsiders their splendid school houses, church and council house, which are all good substantial brick buildings.

Drunkenness is decreasing and since my time on the reserve I have not seen a person under the influence of liquor.

I have the honour to be, sir,
Your obedient servant,

JOHN CROWE,
Indian Agent.

MISSISSAGUAS OF THE CREDIT,
HAGERSVILLE, ONT., 27th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg leave to inclose the tabular statement of the Mississaguas of the Credit for the year ended 30th June, 1895.

The census shows a decrease in the population of seven. The births were only three. There were six deaths, and four removals by marriage into other bands. The deaths were: three infants, two adults from consumption, and one young man killed at Cayuga upon the railroad track.

As compared with the previous year, the wheat, hay and potatoes were a larger crop, and the other crops about the same, or a little lower.

Quite an amount of good fencing was done, and the land is being well cultivated.

Allan Sault has purchased a new threshing machine, and he tells me his prospects for a busy time this fall are good.

The only public work of importance this year has been the removal of the old school house to the council house grounds. It has been very well placed and repaired, and will be quite useful to save the church and council house from the disturbance caused by tea meetings, feasts, and like entertainments.

The church and the school continue to carry on their work in a very satisfactory manner.

The health of the band has been very good, and vaccination of its members has been attended to.

I have the honour to be, sir,
Your obedient servant,

P. E. JONES, M.D.,
Indian Agent.

MOUNT ELGIN INDUSTRIAL INSTITUTION,
MUNCEY, 14th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit to you a brief report of the condition and prospects of the Mount Elgin Industrial Institution for the year ended 30th June, 1895.

The schools have maintained their excellent record of other years. Three pupils were this year added to the list of those who have teachers' certificates. Thirty new pupils were admitted to the privileges of the institute during the year, and an equal number withdrew, most of them having completed the term for which they entered. The average attendance was slightly in excess of the number authorized by the department, which is eighty-five. The health of the pupils has been excellent.

Out of the sixteen boys who retired during the year, one has charge of a school on Walpole Island; another is a student of a French institute in Montreal, and a third is married and settled on a farm on the Oneida Reserve. Eight of the others have had employment as farmers with white men, and are doing well. The other five returned to their homes on the reserves. Out of the fourteen girls who retired three are married, one to a white man; two have since died; and the rest returned to their homes on the reserves.

The two new silos mentioned in my last report with a capacity of 240 tons, have proved a complete success; so much so that we could not think of doing without them. The butter and milk supply of the winter was nearly equal to that of the summer, while the beef cattle were in part shipped from the stables.

The year has been one of the most prosperous in the history of the institute. The returns from the industrial farm have amply supplied the institute with beef, pork, milk, butter and flour, also potatoes, turnips, carrots and cabbage, etc., in abundance.

Our returns from the sale of shipping cattle and horses largely supplemented the income from the department, making it possible, in addition to the year's expenses, to pay for fully $500.00 worth of improvements. A part of said improvements is the addition of a first-class steel wind-mill from the Ontario Wind, Engine and Pump Company, and a system of piping by which the water is elevated into tanks, so as to supply all departments of the splendid new institute now under construction, while the overflow will amply meet the wants of the stockyard.

While I am writing this, the contractor, with a strong force of men, is pushing the work of the new institute. Already it presents a commanding appearance. It is 107 feet x 60 feet, and the walls rise to the height of 50 feet, while the completed tower is 108 feet. The ceilings are respectively 10, 12, 10½ and 10 feet.

The prospect of entering early in 1896 our new home fitted up with all modern appliances is an inspiration that we greatly enjoy.

I have the honour to be, sir,
Your obedient servant,
W. W. SHEPHERD,
Principal.

WIKWEMIKONG INDUSTRIAL SCHOOL,
WIKWEMIKONG, ONT., 22nd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—The year ended 30th June, 1895, has been a successful one generally for this institution. Eighty-five boys and girls have attended the two schools, a grant of $60 *per capita* being provided for seventy-five pupils only. About twelve boys and girls had to be refused admission for want of means to support them.

The new regulations that have been enforced this year by the department, with regard to the admission, dismissal and absence of pupils, have proved efficient in maintaining a regular attendance. There have been during the whole year but few absences, and these from unavoidable cause. Two boys who were stealthily taken away from the institution, after they had been refused a leave of absence, were soon brought back, upon the Indian Superintendent serving their parents an official order to do so.

The pupils have enjoyed good health generally; this result is due not only to substantial food and good clothing but principally to outdoor exercises in which they indulge very freely. They are provided with all sorts of games, especially with a pretty complete set of gymnastic appliances which have helped their physical development to a great extent.

They are docile, they submit willingly to the rules of the institution, and with the exception of a few older boys and girls who are anxious to recover their freedom, they behave generally well and manifest a good spirit.

The routine work in the school room was quite satisfactory; but the proficiency of the pupils in the daily use of the English language is not proportionate to the efforts of the teachers. With a few exceptions, the full blood Indian children of this tribe are rather dull, slow in discarding their native tongue, and show but little interest in the improvement of the mind. It is hard to bring them up to a higher standard of learning.

On the other hand they are very fond of industrial training, and make good progress therein. They manifest a special inclination for farming, and we make a point to encourage it, since farm work will be their principal means of earning their living. There is but little room on the reserve for the practice of other trades, and very few Indian tradesmen will ever be acceptable to work outside their reserve, principally on account of racial prejudices. Still, there are a few boys trained in blacksmithing, tinsmithing, carpentering and house-painting. The saw-mill, shingle-mill, planing-mill, and sash and door factory, connected with the carpenter shop, are being entirely refitted, at considerable expense; a new wing with a new 35 h.p. engine has been added lately.

I have the honour to be, sir,
Your obedient servant,
J. PAQUIN,
Principal.

FORT WILLIAM MISSION, 30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—We beg to submit our annual report for the fiscal year ended 30th June, 1895.

Everything was fairly progressing from re-opening of school until the end of winter, when to our misfortune on the 10th of April, fire broke out in the orphanage, very probably owing to a brick getting loose in the bake oven or chimney; the orphanage and church were utterly destroyed. Fortunately the weather was fine, the hour early in the day, and all up. A great number of men, both Indian and white, from the mill, came to our assistance, and, although they could not save the building, still they saved a good deal of furniture. The loss, however, is very great in clothing for both the sisters and children, also bed and bedding and other effects.

The building was insured for $5,000. The accident was more keenly felt, as we had just completed at a great expense a new dormitory and bake oven, with many other repairs, not to speak of pump, baths and drain, which the department had furnished us at the expense of $300. However the work of rebuilding has begun, and we hope within four months to see a new orphanage receive its inmates.

Three pupils died last year, one little boy and two girls. At the time we were in great anxiety about the health of the children, as all in turn were victims of scarlatina. The epidemic was not confined to the orphanage: it existed also in the village, and even in Port Arthur and Fort William.

The progress in the school has been satisfactory. Since the fire the Indian council house has been used as a school house, one class upstairs and one below.

The sisters occupy the old school house, one-half of which serves as a kitchen and refectory for all. The twenty children under our charge at present, with two sisters, sleep in a house a short distance from the school, lent them by an Indian, and which has been fitted up as comfortably as circumstances would allow for the few spring and summer months.

We have the honour to be, sir,
Your obedient servants,
SISTERS OF ST. JOSEPH.

SHINGWAUK HOME,
SAULT STE. MARIE, ONT., 30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to present to you my first report in connection with the working management of the Algoma Indian Homes for the year ended 30th June, 1895, and I beg to state that, having been but recently appointed to the principalship of these Homes, my report consequently will be somewhat brief.

Attendance.

The records of the institution show that one hundred and nine pupils, representing thirteen reserves, have enjoyed the advantages of these Homes during the past year, forty-five have been enrolled, six discharged, one died at the hospital and was buried in the Shingwauk cemetery, one was allowed to go home and did not return, and two others are absent on sick leave.

Owing to an outbreak of erysipelas amongst the girls, which it was feared would spread, they were sent home temporarily last fall, pending the provision of increased and more suitable accommodation. The total enrolment at this date is sixty-five boys and two little girls (aged respectively two and four years).

Health.

Since taking charge, on the 1st of January, I am happy to say the health of the pupils has been very good.

The school routine is as follows:—

6.00—Rise, wash, dress, silence called for prayer, bed making.
6.45—Roll call and prayers in school room.
7.00—Assemble (where appointed).
7.05—Breakfast, march in order, stand for grace.
7.30—Rise, grace, workers to work, others to preparatory class.
8.30—Morning pupils assemble in school room.
8.35—Roll call by classes, morning school.
10.30—Fifteen minutes' recess.
12.00—Close school, workers quit work, wash, assemble (where appointed).
12.05—Dinner, march in order, stand for grace.
12.30—Rise, grace, dish washers remain, others to play.
1.00—Afternoon workers to work.
1.30—Afternoon pupils to preparatory class, workers to work.
1.35—Roll call by classes, afternoon school.
3.00—Fifteen minutes' recess.
5.00—School closes.
6.00—Assemble (where appointed).
6.05—Supper, march in order, stand for grace.
6.30—Rise, grace, march in order, dish washers remain, others to play.
7.00—Assemble all.
7.05—"English" roll call, prayers in school room.
7.15—Pupils who have to report go to superintendent's office, junior pupils to bed (preceded by monitor), evening preparatory class (under monitor).
8.00—Medium sized pupils to bed.
9.30—Senior pupils to bed, dormitory gates locked.

Wednesday Afternoons.

1.00—(No trades or outside work on Wednesday afternoons).
1.05—Roll call. Examination for cleanliness. Inspection of every-day clothing and giving out new clothing. General clothes mending.
3.30—Put on uniform and prepare for inspection.
3.45—Inspection of dormitories and uniforms by staff.
4.15—Drill.
4.45—Choir practice.

Saturday Mornings.

General house cleaning, chore work, etc., by all.

Saturday Afternoons.

Holiday.
4.30—Workers to work.
Evening—Baths.

Sundays.

First bell at 7.00. Breakfast at 8.00. Prayers at 8.30. Church at 10.30. Dinner at 12.00. Sunday school, 2.00 to 3.00. School service at 3.30. Supper at 5.30. Prayers at 7.00. Bible questions, 7.00 to 8.00.

Classes.

Steady progress has been made in all class work. The standing of pupils at present in attendance is as follows:—

Standard—	1	9.
	2	24.
	3	12.
	4	13.
	5	4.
	6	3.

Three pupils wrote on the entrance examination in June last and three on the public school leaving examination. The results have not yet been published.

Trades.

During the year the following trades have been taught:—carpentering, tailoring, shoemaking, farming and, for a time, weaving.

Satisfactory progress has been made in each department, the pupils taking a great interest in their work and showing a desire to become proficient.

I have the honour to be, sir,
Your obedient servant,

GEO. LEY KING,
Principal.

MOHAWK INSTITUTION,
BRANTFORD, ONTARIO, 1st August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith a report on the Mohawk Institution for the year ended 30th June, 1895.

Attendance.

During the year 10 boys and 6 girls entered, and 5 boys and 14 girls left the school; our number on the 30th June was 107, viz., 51 boys and 56 girls. The average attendance was 108.

Health and Conduct.

Beyond one case of typhoid fever (imported) and one case (fatal) of inflammation of the brain, there has been no serious sickness. The general health of the school has been and continues exceptionally good.

The general conduct of the pupils has been very satisfactory: what misconduct there is, is confined to a few.

Education.

The educational progress of the pupils has been fairly satisfactory.

Mr. E. C. Ashton resigned the mastership in September, and was succeeded by an experienced teacher, well recommended, but who does not readily adapt himself to a class of students so totally different from those he has been accustomed to.

O. P. successfully passed the entrance examinations last summer and is attending the Collegiate Institute. P. W., H. B. and L. G. completed their course of training as Indian school teachers; the latter is attending the Collegiate Institute.

Two pupils wrote at the entrance examinations this summer (both passed August 1st). N. L. successfully passed the examination for the second class non-professional certificate, but failed to obtain the professional certificate at the completion of the model school course, lacking, however, only two marks in hygiene.

The "Nelles" medal for general proficiency was awarded to Omer Plante.

At Christmas the classes were rearranged to accord with the excellent "Programme of Studies for Indian Schools" issued by the department.

In future the *pass* examination of this school will be that appointed for the public school leaving examination "Ontario."

Accommodation.

This institution is fully equipped for 120 students, 50 boys and 70 girls and could easily accommodate 135 (5 boys and 10 girls more) without entailing any additional cost except for food and clothes. I have now over fifty applicants whose agreements are signed, and many others are praying for admission.

Owing to the decreased receipts from farm and garden, I have been unable to maintain more than 110 this year.

An increased grant from the department is urgently needed.

Farm and Garden.

The year was very unfavourable to farming operations. In the month of May the rain fall was nearly seven inches, whilst from 4th June to 4th September, inclusive, it was only 1¼ inches. Owing to the drought regular farm work was brought to a stand still in the month of August. I therefore had the stones gathered from the fields and fence corners, and paved a strip ten feet wide along the front of the farm buildings, and also paved a roadway to the water trough, in all 400 square yards of solid comfort in wet weather.

Tradeshop.

Besides carrying out extensive alterations and repairs in main building, Mr. House and his boys were employed for nearly two months in repairing and improving the school house on the reserve (for details of work done see report of the school board). They also erected a frame building 16 by 30 feet, with a brick basement, the latter to be used as a poultry house, where the girls will be instructed in the rearing and care of poultry. The upper story is for a store room and a room for separating milk. With the exception of the siding and shingles, the whole building was erected from old materials accumulated from various alterations and repairs.

I have the honour to be, sir,

Your obedient servant,

R. ASHTON,

Principal.

The expenditure for buildings and grounds includes:—

School No. 1. Repairing and screening closets, finishing fences, new sidewalk, new stove, general repairs.

School No. 2. Repairing and screening closets, re-shingling roof, repairing plaster, whitewashing, new stove, &c.

School No. 3. Lot enlarged, re-fenced, school house moved, interior sheeted, re-floored, closet removed and screened, new sidewalk, all buildings painted inside and outside, new stove, &c.

School No. 5. Roof, fences, closet, foundation, steps and plaster repaired, exterior painted and interior whitewashed, generally repaired.

School No. 6. Closets screened, fence, sidewalk, conductors and windows repaired.

School No. 7. Lot graded, new fences, closet screened, sidewalk and steps, interior re-painted and whitewashed.

School No. 9. Lot graded and re-fenced, school house roof and window repaired, closets screened and painted, general repairs.

School No. 10. Re-painted and generally repaired.

School No. 11. Closets screened and painted, new front steps, &c.

Requirements.

School House No. 5. To be sheeted inside and the ceiling lowered as the plaster is continually falling off. Slate black board.

School No. 9. A new and enlarged building as soon as funds will admit.

School House No. 11. Re-painting, fencing, &c.

The tabular statement of the condition of the schools shows for the year:—

1. A gratifying increase of 141 names on the school roll or 33·6 per cent.
2. An increase 5·9 per cent on the average attendance.
3. A decrease of 4·9 per cent on the average attendance largely owing to the increased enrolment.
4. A decrease of 15 present at the annual examination.
5. An increase of 14·6 of passes upon examination as compared with the previous year.

This I think is a very favourable showing.

Appended is a table showing the whole school population of the Six Nations' Reserve under the charge of the Board, the number of children attending school and where they attend, also the number of children who are not attending any school; these latter amount to twenty-five per cent of the whole school population.

The boundaries of the several school sections are purely theoretical and will have to be modified, being arranged solely for the purposes of this report. Pupils are expected to attend the school they can reach most conveniently.

In the near future better qualified teachers will be necessary in most of the schools. The difficulty in obtaining the services of fully competent teachers has been the securing of suitable boarding places. I strongly recommend that to some of the school houses an addition of two rooms for the teacher's residence be erected.

The day schools on this reserve should be rendered as efficient as possible, so that the children of well-to-do Indians may receive a fair education without attending an industrial school, as the latter have sufficient demand upon their accommodation for orphaned, destitute and neglected children, and should aim rather towards a thorough industrial and character training of the pupils than to giving a high-class education, which is too often wasted upon those who, not appreciating the necessity and dignity of self-help and self-reliance, consider themselves above the ordinary occupations of working men and working women. It is not the duty of government or of missionary societies to spend large sums forcing upwards those who when the propelling force is withdrawn have no innate power of maintaining their enforced positions.

I beg to recommend that teachers whose salaries have not been advanced beyond the usual amount and whose average attendance for the year exceeds twenty, be granted $2 for each pupil beyond that number, and that in future the annual engagements of teachers be made from the 1st of January.

R. ASHTON,
Hon. Secretary.

Adopted as the report of the board, 7th August, 1895.

R. A.

Members of the School Board

E. D. Cameron, Esq., representing the Indian Department.
Rev. R. Ashton, Rev. J. L. Strong, do New England Company.
W. Wilkinson, Esq., do Methodist Conference.
Chief Joab Martin, Chief William Smith, Chief Jacob S. Johnson, do Council of Six Nations.
Rev. I. Bearfoot, Inspector.

SCHOOL Population of the Six Nations in the Townships of Tuscarora and Oneida, for the Year ended 30th June, 1895.

	School Sections.										Totals.
	1.	2.	3.	5.	6.	7.	9.	10.	11.	**	
Attending Section School	31	40	63	35	20	80	29	57	56	....	411
" School No. 3	....	....	....	....	....	1	....	....	....	....	1
" " No. 5	....	6	....	....	1	....	....	....	....	....	7
" " No. 6	....	....	....	3	....	....	....	4	....	....	7
" " No. 7	1	....	1	....	....	....	....	....	....	....	2
" " No. 10	....	5	....	....	....	....	....	....	....	....	5
" " No. 11	....	....	....	....	....	....	....	1	....	....	1
" New Credit School	....	....	....	....	....	....	*6	....	....	....	6
" Thomas' "	18	23	5	....	....	1	....	....	....	7	54
" White Schools	....	....	4	1	3	1	4	....	....	....	13
" Mohawk Institution	....	4	3	5	8	2	3	....	3	....	28
" Mt. Elgin "	1	4	....	....	....	1	....	2	....	....	8
Not attending school	23	24	3	15	19	32	8	20	27	10	181
Totals	74	106	79	59	51	118	50	84	86	17	724

**These children do not reside within a board school section, but can conveniently attend Thomas's school.
*Mississaguas of New Credit residing on Six Nations Reserve.

A few children reside in Onondaga, north of the river; they attend the "White" school, the board paying their school fees.

The longest distance from the nearest school does not exceed two and three-quarter miles.

School population (six to sixteen years)..... 724.
Attending school..... 543, or 75 per cent.
Not attending school..... 181, or 25 "

R. ASHTON,
Honorary Secretary.

ANNUAL REPORT OF THE SCHOOL BOARD OF SIX NATIONS INDIAN RESERVE FOR THE YEAR ENDED 30TH JUNE, 1895.

FINANCIAL STATEMENT.

Receipts.	—	—
	$ cts.	$ cts.
To Balance brought forward	... .	1,156 36
Annual grants—		
New England Company	1,000 00	
Indian department	450 00	
Six Nations' council	1,500 00	
Methodist conference	250 00	
		3,200 00
Sale of shed, S.S. No. 3	.....	15 00
		4,371 36
Expenditure.		
By Salaries	2,502 50	
Buildings and grounds	876 46	
Fuel	125 25	
School requisites	48 36	
Printing and office expenses	12 10	
Prizes	73 00	
Sundries	12 70	
School fees	8 50	
Insurance	47 88	
Bank interest	45	
		3,707 20
Balance in bank	.. ..	664 16
		4,371 36

PROVINCE OF QUEBEC,
ST. REGIS, 9th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my report and tabular statement for the year ended the 30th June, 1895.

The progress of the St. Regis Iroquois Indians at present is favourable. I find that the Indians in general are improving in agricultural pursuits.

The basket and lacrosse industry is still in progress, not so much in summer season as in the winter. A number of the Indians attend pretty well to the cultivation of their land, which will be to their benefit.

I find, when travelling over the reserve and the different islands, that their present crops are looking well and the Indians appear to be contented, although at times they are easily excited in minor matters.

At the last census of the band there was twelve hundred and thirty-one, making a decrease of eighteen.

The five schools in my agency have been open as usual, although the attendance is not what it should be. The progress is fair, and I hope to report better progress in the future.

The Rev. Mr. Mainville, missionary, takes much interest in the education of the Indians under his care, frequently visiting the schools, also advising the parents of the advantage it would be to their children, more especially the learning of the English language.

I am happy to report that I find a vast improvement in the advancement of the Indians in general for the last eight years in my agency.

I have the honour to be, sir,
Your obedient servant,
GEORGE LONG,
Indian Agent.

RIVER DESERT AGENCY,
MANIWAKI, Que., 10th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report with tabular statement for the year ended 30th June, 1895.

The sanitary condition of the band continues good. During the past year there were ten deaths and twenty-one births. Three members who had been absent more than five years had their names taken off the list, and one was added by marriage, leaving a net gain of nine. There are now three hundred and seventy-nine on the pay roll.

Although there was a very severe epidemic of scarlet fever prevalent among the white children of Maniwaki and vicinity last winter and spring, which caused more than fifty deaths, yet there were but few cases of the disease among the Indian children.

The sanitary regulations have been observed, and the Indians are encouraged to whitewash their dwellings and out-buildings. Lime is furnished them free for this purpose.

Some fifty members of the band were vaccinated last summer. It is proposed to vaccinate all those requiring the operation about the 20th instant, when the absentee Indians will be here for the annual festival.

The band physician, Dr. Mulligan, continues to perform his duties with satisfaction to myself and the Indians.

The crops on the reserve last season were up to the average, excepting oats, which were not as productive as usual.

Last spring about twelve acres of new land were brought into cultivation.

Several members of the band are erecting new dwelling houses.

The Indian school is now taught by Mr. Doyle, who was appointed to the position on the resignation of Mr. McAuley. Mr. Doyle is a painstaking, efficient teacher, who takes pleasure in his work, and his pupils are progressing rapidly. Unfortunately the attendance is rather small. Some of the children who are near enough to attend, especially during the summer, will not be sent to the school by their parents.

The roads and bridges on the reserve are generally in good condition.

I have the honour to be, sir,
Your obedient servant,
JAMES MARTIN,
Indian Agent.

Department of Indian Affairs.

PIERREVILLE, 1st August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement for the year ended 30th June, 1895.

I am happy to be able to say that the Indians here are making progress in civilization; they appear to be cultivating self-respect, for very few of them depend on public charity for a subsistence. Nearly all make a good living, which is afforded them chiefly by the making of fancy wares, such as baskets, lacrosses, arrows, etc., which they sell during the summer in the United States at good prices; this is their principal occupation.

The two schools have been regularly held this year. The Roman Catholic school, under the direction of Sister St. Lawrence, is showing excellent results. The Protestant school, conducted by the Rev. H. O. Loiselle, is not sufficiently well attended. It seems difficult to get the parents interested in sending their children, as they pretend that they require their assistance at home.

The hunt was not as successful this year as usual.

The general health of the Indians has been good. No contagious disease appeared on the reserve during the present year.

The greatest trouble at present existing on the reserve is intemperance, to which unfortunately many of the Indians are addicted. The chiefs of the tribe have worked hard against this abuse, which is very difficult to fight against and abolish, owing to the nearness of the reserve to places where liquor is sold. Hoping that success will crown their efforts,

I have the honour to be, sir,
Your obedient servant,

A. A. MONDOU,
Indian Agent.

BÉCANCOUR, P.Q., 14th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report with tabular statement for the year ended 30th June, 1895.

The Abenakis Band of Bécancour is composed of fifty-five members as shown by the census last spring.

There has been no contagious disease during the year, and the band generally has enjoyed fair health.

The making of baskets and other fancy wares is the most lucrative occupation of these Indians. Only one member of this band engaged in hunting, but he did so with good profit.

Some of the Indians act as guides to American tourists.

Some suffering was caused by the poor harvest and the improvidence of some of the Indians; but the assistance granted by the department alleviated their distress.

With rare exceptions, the conduct of this band is good.

The attendance at school has been fair.

I have the honour to be, sir,
Your obedient servant,

H. DESILETS,
Indian Agent.

MARIA AGENCY,
PROVINCE OF QUEBEC, 14th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report for the year ended the 30th June last, accompanied by a tabular statement for the same period.

Since last year four adult persons have died of consumption and another of inflammation of the lungs. One of those that died was the beloved chief of the reserve, Noël Condo. There were also several deaths among the children.

The harvest was very small last year on account of the frost in the beginning of September. That of this year will be good unless a similar accident should occur.

In the matter of temporal things I do not see much progress: always the same carelessness and the same improvidence, causing distress to several families when work ceases, especially during the severe weather of winter. Some of them, however, seem to wish to correct these failings. Their example will, perhaps, have a good effect on the others.

I have the honour to be, sir,
Your obedient servant,

J. GAGNÉ, Priest,
Indian Agent.

POINTE BLEUE, 13th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement for the year ended 30th June last.

The census this year gives an increase of 54 in the population over that of last year. This is the result of a number of Montagnais families, strangers on our reserve, having come down this year with the intention of remaining for the future.

Last fall a large family was attacked with typhoid fever; one of their number died of it; fortunately the contagion did not spread.

I am glad to say that our Indians are making very marked progress; farming operations have been conducted on a larger scale and with more care; the Indians here built nice little houses and they keep them clean inside. There has also been improvement in comfort and tidiness. The Indians have done a good deal of work on their road and at their own expense.

The council is beginning to work; it is taking an interest in administering its affairs itself; it is trying to do everything in a good and orderly manner.

The crop of hay was good; that of grain was poor. Stock-raising continues to occupy more and more attention.

Hunting was successful and furs brought a good price.

Strong drink, that curse of the age, here as elsewhere, causes terrible ravages; the Indians can obtain it more easily than in the past. Frequent prosecutions and convictions do not always have the effect of frightening the liquor sellers; there are always some who will run the risk.

The school has not been very well attended. This is owing to the negligence of the parents. We hope for better things next year.

The sanitary condition of the Indians is better than usual.

With the exception of drinking, our Indians have given satisfaction this year.

I have the honour to be, sir,
Your obedient servant,

L. E. OTIS,
Indian Agent.

NORTH TEMISCAMINGUE, P. Q., 15th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report and tabular statement for the year ended the 30th June, 1895.

I have but little change to report as to the condition of the Indians of this agency. Those Indians that are healthy are making a pretty good living by different occupations, fur hunting in winter, while others are working in the shanties or on other jobs; most of them have comfortable little houses and are very clean. During summer most of them remain at home improving their farms. There is no good grist mill on the lake and they have no encouragement to sow wheat. The soil is good on this reserve; it will produce all sorts of grain and vegetables, if it is properly attended to, except during some seasons when the frost slightly injures the crops.

There is a little church on the reserve and a school house; both are situated in the centre of this settlement. The school teacher, Miss Marion J. Legge, is very attentive and active; the attendance is very fair and the children are making good progress.

I have the honour to be, sir,
Your obedient servant,

A. McBRIDE,
Indian Agent.

PROVINCE OF QUEBEC,
CACOUNA, 17th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, accompanied by tabular statement, of the Amalecite Band of Viger for the year ended the 30th June last.

I have very little change to note in the Indians of this agency. They have been engaged this year in the same occupation as in previous years—that is to say, in the making of baskets, snowshoes and fancy articles, which they sell at good prices as a rule.

Few families reside on the reserve at Cacouna. Since the sale of their Viger Reserve, in 1870, these Indians have been in the habit of wandering about. However, two families have been living on the reserve since spring.

The health of these Indians has been satisfactory this year. There was not a single case of contagious disease. Two old men died—one 78 and the other 64 years of age; on the other hand, there were three births.

The children do not attend school as well as they might. The parents appear very indifferent about the matter.

I have the honour to be, sir,
Your obedient servant,

NARCISSE LEBEL,
Indian Agent.

PROVINCE OF QUEBEC,
CAUGHNAWAGA, 17th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the Indians of Caughnawaga for the year ended 30th June last; also tabular statement.

The number of births during the year was 81 and the number of deaths 52, making an increase of 29 for the year.

The schools on the reserve have been doing well, and the pupils that have attended regularly have made progress. The improvements made under the direction of the government to the boys' school during the year will add much to the comfort of the pupils and teachers.

There was no contagious disease on the reserve during the year.

Under my direction repairs were made to roads and bridges by the Indians which will be of great benefit, not only to those residing on the reserve, but to persons using the roads passing through the reserve. The cost of the work was borne by the government.

The agitation of a large number of the Indians for a return to the ancient system of electing chiefs has subsided.

The year's harvest is very satisfactory, and I observe with pleasure that the Indians have turned more to agriculture this year than formerly.

The affairs of the tribe generally are satisfactory, and the Indians are well and quiet.

I have the honour to be, sir,
Your obedient servant,

A. BROSSEAU,
Indian Agent.

CAMPBELLTON, N.B., 20th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report, also tabular statement, respecting Indian affairs in my agency.

These Indians always obtain employment from lumbermen on account of their skill in cutting logs. They are also engaged in preference to others to take timber down the different rivers as far as the rafting grounds, where the timber is put together in cribs and taken to the numerous saw-mills on the banks of the Restigouche near its mouth. On account of their skill these Indians can command good wages, and this, with what they earn in summer when acting as guides to sportsmen who come to catch salmon and trout in the Restigouche and its tributaries, is their chief means of livelihood.

Generally they are peaceable and industrious, except when they obtain liquor, which they can always procure in one way or another by means of "go-betweens." It is useless to try to make them inform on the offenders, and consequently it is very difficult to apply the law and punish the latter.

This summer His Lordship Bishop Blais, of Rimouski, formally opened for service the new church, a substantial building, erected to replace the one destroyed by fire in the summer of 1893. This church, although small, is built of red brick with a stone foundation and metal roof, which diminishes the chance of fire.

I have been able to procure for the school on the reserve the services of Miss Marie Isaac, a young Micmac who received her education here at Campbellton and in two convents. She has a first-class diploma for teaching in primary schools granted by the Board of Education for the County of Bonaventure. She is also highly recommended by the Government School Inspector, Mr. Lucier. As she has the advantage of knowing the English, French and Micmac languages and being able to write in them, marked progress ought to be the result among the pupils of the school on the reserve. She is the first Micmac that ever received a diploma for teaching.

The crops are equal to the average. The hay suffered from the drouth followed by rain when it was growing. The oats are very good; but the potatoes have been nearly spoiled by the flies.

I am, sir,
Your obedient servant,

V. J. A. VENNER, M.D.,
Indian Agent.

LA JEUNE LORETTE, P.Q., 15th August, 1895

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement for the year ended 30th June last.

General Condition.

With few exceptions the Hurons of Lorette have lived during the year in a very indifferent condition of comfort: by nature loving the woods, when the hunting and fishing seasons come round they must be off even though other interests ought to keep them in the village.

Unfortunately hunting and fishing are no longer as profitable as formerly. In spite of the limitations and restrictions imposed by the government of the province of Quebec, the moose, the beaver and fish are becoming scarcer and scarcer; and in the few months fixed for hunting and fishing the Indians are unable by these occupations to provide the necessaries of life for their families. So, this means of subsistence, which formerly afforded them a comfortable living, disappearing, they live in the indifferent condition of comfort of which I have just spoken.

Summer is for many of them the golden season. Strangers coming to fish on the lakes in the district of Quebec never fail to take our hunters and fishermen with them as guides, for the latter are considered the most skilful in the province.

The only industries upon which the Hurons of Lorette depend for a living are the making of moccasins, snow-shoes and fancy articles. Unfortunately these remunerative industries, owing to depression in trade, are growing less and less. This year especially competition has increased so much that the chief men of the tribe engaged in these industries thought at one time that they should be obliged to give up the occupation,—a gloomy prospect which has forced some families to try a venture in the American republic. Fortunately, however, the demands of Ontario and the west have raised the state of affairs a little; the village was threatened with a regular emigration. This disaster was prevented through the efforts of some courageous men of the tribe, notably Mr. Maurice Bastien, jr., who, to the detriment of his own business, with the sole object of assisting his compatriots, continued to give work to families in the village and to prevent their leaving the country.

It is to be hoped, though it is difficult to imagine, that this industry of making moccasins and snow-shoes will sometime become as remunerative again as formerly, when it afforded a living to our Huron Indians exclusively; half of it has now passed into the hands of speculators, who trade on the margin of abatement on these articles, which, however, do not lose any of their quality or actual value.

Nearly all the women of the village work with admirable skill with the hair of the moose and ash wood, which they use is making a thousand and one Indian curiosities, surprising to strangers. All through the summer they are engaged in this art, which is a small source of revenue to them; but, the sale of these products having suffered a depression similar to that of the moccasin industry, the revenue is less.

Agriculture.

On the Quarante Arpents Reserve there are only about a hundred acres under cultivation this year, and these were worked by six Huron families. These families are in a difficult position. Although the land is suitable for cultivation, these farmers, not being able to make the improvements required for careful and profitable cultivation, not being able either to borrow or mortgage, get very little return from their land and are obliged to turn to expedients and work at day labour to support their families.

As a rule they raise potatoes, oats and vegetables; but this year potatoes here, as elsewhere, have completely failed: the Indians did not get back even their seed. Oats did not turn out as well as in the preceding year; but there is a great quantity of hay of superior quality.

The Seigniory of Rocmont, in the County of Portneuf, Province of Quebec, is still under license for the cutting of spruce and pine. The license will expire on the 30th April, 1897.

Relief of Distress.

Out of its funds and those provided by the department, the tribe has not asked for any assistance this year except for Cyprien Vincent, a poor paralytic, who died on the 26th June last, to whom a monthly grant of $5.00 was made, and for Joseph Sioni, who is infirm and has a family to support: he received an allowance of $25.00. An amount of $5.00 was given respectively to widow François Lawinens, an Algonquin, Jean Degonzaque, an Abenakis of St. Francis, and to widow Théodule Nepton and Jean Baptiste Philippe, two other Abenakis Indians residing at St. Urbain, county of Charlevoix, in my agency.

Health.

These Huron people have enjoyed the unusual good fortune of having perfect health. They were not visited by any epidemic. This perfect condition of health may be attributed very much to the observance of regulations passed by the chiefs and sanctioned by His Excellency the Governor General in Council on the 21st September, 1891.

Conduct.

The laws of justice, morality and temperance have as a rule been faithfully observed in the village, and if during the course of the year temperance was not always maintained, it was altogether owing to the fact that our Indians frequently went to the city of Quebec and met their white friends. In order to avoid all infraction of the laws governing Indian tribes, the chiefs in the month of May last by a resolution which was unanimously adopted (drawn up by myself) notified all persons concerned not to sell any intoxicating liquor to Indians under pain of being prosecuted with the utmost rigour of the law. These warnings have been sufficient and it would be impossible to enforce the observance of the law in a more efficacious manner.

Education.

Eighty-seven children are of an age to attend the single school at Lorette. In view of this very considerable number, the heads of families have learned with pleasure that a second teacher will be granted them very soon, which will make teaching easier and more effectual.

In the Huron village there are a certain number of young men who are really capable of a higher education, which would qualify them for business or professions, and some of them are aspiring in this direction more than ever. In the course of last winter some of them, more favoured than the rest, were able to take private lessons, which enabled them to obtain employment as clerks or to fill other worthy positions. This result has created some emulation among them, which shows that a taste for study is increasing among the children of the village and that they are only waiting for an opportunity to develop it.

Population.

The present population of the Huron tribe is four hundred and nine, which shows an increase of one hundred and nine over last year. However, in explanation of this increase, which seems excessive, I ought to say that in previous statistical statements I did not mention the Hurons absent from the reserve: these bring the present population up to 409.

Indians in my Agency not belonging to it.

I have also in my agency thirty-one Indians of the Amalecite tribe residing in the county of Quebec, who have no reserve, who live by industry, hunting and fishing and do not cultivate any land.

I have also fourteen Indians of the Abenakis tribe of St. Francis, residing in the county of Quebec, living solely by industry.

Thirty Micmac and Abenakis Indians, residing in the county of Charlevoix, live by hunting and fishing, and cultivate very little land.

Lastly, I have in my agency an Algonquin Indian, seventy-eight years of age, who lives at Lorette, and is supported by public charity and such assistance as the department grants him from time to time.

I thought it well in this report to inform the department of these strange Indians living in the counties of my agency, although I am unable to give any fuller details on the subject.

I have the honour to be, sir,
Your obedient servant,

ANTOINE O. BASTIEN,
Indian Agent.

SHUBENACADIE, N.S., 30th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I submit herewith tabular statement for the year ended 30th June.

The Indians of this agency are in fairly good condition and the majority of them are improving.

The school opened during the year has been a success.

The crops are looking fairly well. The hay crop is light this year all through this district.

I have the honour to be, sir,
Your obedient servant,

JAMES GASS,
Indian Agent.

CHRISTMAS ISLAND, C.B., 19th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I enclose herewith tabular statement for the year ended 30th June, ult.

I have nothing of importance on which to make report. The Indians of this district are getting along in their usual quiet way. There were fifteen deaths and only eight births during the year, consumption being the chief cause of mortality among them.

Owing to the long continued drought of this summer, and the prevalence of the potato bug—being more numerous this year than ever before—both hay and potatoes will barely be half a crop.

I have the honour to be, sir,
Your obedient servant,

A. CAMERON, P. P.
Indian Agent.

ST. PETER'S, C. B., 16th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit, in addition to tabular statements already forwarded to the department, the following report for the year ended 30th June, 1895.

The history of our reservation does not contain anything new or important since my last report. It may be that some little progress has been made in the way of farming by the comparatively small number who take anything like interest in that pursuit, but it is evident that a good deal more should have been made. A few acres of woodland have been attacked, as will be seen by reference to tabular statements, but it will take yet a few years to make that new land really profitable. The transition from a potato patch in burnt land to a clover field is usually slow in the land of the "red man," though he himself does not find the time long. The Indian has a peculiar idea of time, or perhaps it were better to say that he has no idea at all of it. Hunger, with the prospect of a late dinner, is about the only thing that causes him to feel that the fleeting moments are to be reckoned with. I speak more particularly of the older generation, whose influence, of course, must yet be strongly felt, when there is a question of modern advancement, such as the cultivation of the soil. They are actually a drag on the wheels of progress, and the sooner they have left the scene for their "happy hunting ground," the better, I judge, for the material advancement, at least, of their children. Tradition has cer-

tainly a remarkable influence over Indian life, hence the necessity of contenting ourselves with short stages on the long road to the confines of civilization. It ought not to be quite so, however, in the course of time. The impress of our excellent school should be seen in the customs of the forthcoming generation, and perhaps there is, after all, a good day in store for the Indians of the next century. With advantages now to which their fathers were strangers, a little pluck and ambition should do the rest.

I am happy to say that the Indians under my supervision are good Christians. It may be said, I think, that their lives are the most faithful image of, the nearest approach to, that simplicity of faith which characterized the early Christians. Those who cannot separate religion from social progress will, of course, laugh at this; let them, the fact remains. The Indian knows nothing of the ways of the fast, giddy world; he knows his own little business though, and to that he devotes himself in the spirit of the true, simple-minded Christian. Poor old Noel has but little of the gear of life in his possession, but Noel is all right. He acts conscientiously, and so long as he cheerfully suffers, and serves his God, then away with the empty glitter of the busy world. I may as well admit that I am sometimes seriously of opinion that when the Indian grows more independent in the world, and his condition, in the language of modern progress, has improved, he will not have become thereby more happy, more moral, than he is to-day. I refer especially to the Indians of Cape Breton, and the same, no doubt, can be said of the Micmacs of the Lower Provinces. What true apostles were Father Maillard and the other missionaries, who brought to the Micmacs the light of faith, and implanted so deeply in their souls the truths of the Gospel! One must know the Micmacs as I do to realize that.

But I must not unduly praise the Micmacs of St. Peter's—there are just a few exceptional instances of lawlessness to be recorded. I refer to a certain few individuals of the tribe who claim the right to encroach unduly sometimes on the property of their "pale-faced" neighbours. Not that they act with full consciousness of guilt, but under the impression that there is nothing in the moral law to forbid an Indian from cutting a tree, no matter where, and carrying it home. The chief and captains, fearful for the salvation of the parties in question, have been leaving no stone unturned to put a stop to the evil, and their efforts promise to bear fruit. This is the way the troublesome braves justify their conduct:—

A fox is worth more than a tree.

But we can trap a fox no matter where.

Ergo a fortiori (Italics mine) we can cut a tree no matter where. A fatal fallacy lurks, as is evident, in the syllogism, but it is hard to make an Indian see it, so that it requires a good deal of patience and ingenuity to convince the poor sophist that his logic is not sound. Once convinced, however, there is an end of the trouble. Instances of this kind, be it remembered, are not many, and the great wonder is that there are so few, considering on the one hand the poverty and suffering of the poor Indian, and on the other, the opportunity he has of doing harm to his neighbor, if so disposed. It is a question whether the same number of white men, pressed by similar want, would be equally honest.

Our school continues to do good work, in care of our former teacher, Mr. Campbell. The attendance is fairly good, and thanks to the department, the pupils are amply furnished with books and all the other requirements. Many of the young folk can read and write, and not a few have a knowledge of the simple rules of arithmetic.

I have the honour to be, sir,
Your obedient servant,

J. C. CHISHOLM,
Indian Agent.

DISTRICT No. 11, RIVER INHABITANTS,
GLENDALE, N.S., 6th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—In making a report for the year 1894-95 I have little to add to my report of last year. The Indians in my agency, especially in the Whycocomagh Reserve, are yearly devoting themselves more industriously to agricultural pursuits. The coming winter will, however, witness more destitution among them than for some years past, unless the fatherly care of the government provides additional relief for their increased necessities.

A long continued drought in June and July has caused the hay crop to fall short one-half on the uplands, and on the meadows and marshes to be very light. This with the advent of the Colorado potato bug causes many of them to look forward to the coming winter with much concern.

On the Malagawatch Reserve there has been an influx of some families from the vicinity of St. Peters in Richmond county. This is partly due to the adjacent waters being an excellent fishing ground.

I have the honour to be, sir,
Your obedient servant,
D. McISAAC,
Indian Agent.

DISTRICT No. 12, BADDECK,
VICTORIA COUNTY, C. B., 5th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first annual report and tabular statement since my appointment for the county of Victoria for the year ended 30th June, 1895. There has been a great deal of sickness among the Indians at the Middle River Reserve, within my district, during the last year. A number of deaths occurred.

Consumption seems to have been the prevailing disease among them.

The school has been in operation during the last year; the attendance has been fairly good, and considerable progress has been made by pupils attending. The crops compare favourably with the best years, the hay crop with many even better. The Indians of this district are sober and very industrious.

I have the honour to be, sir,
Your obedient servant,
JOHN E. CAMPBELL,
Indian Agent.

DISTRICT No. 7, PARRSBORO', CUMBERLAND COUNTY, N.S.,
16th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour of submitting my annual report and tabular statement for the fiscal year ended 30th June, 1895.

As a result of the action of the department in permitting the Indians to cut and sell the dead and burned timber on the reserve, the Indians have been during the past year in a more prosperous condition than for many years.

They have built three very comfortable frame houses, have purchased a horse, a cow, a wagon, plough, harrow, &c., and were able this spring, without direct assistance from the department, to put in the ground a fair amount of seed.

The crops are looking well, and the potatoes, in particular, promise anexcellent yield.

Many of the young Indians are away from the reserve this summer earning money by working in the different lumber mills.

There has been a great deal of sickness during the past year and a few deaths have occurred.

The number in this band has increased by four during the past year.

I have the honour to be, sir,
Your obedient servant,
F. A. RAND,
Indian Agent.

SHEET HARBOUR, N.S., 13th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June, 1895.

I have to state that the Indians of this agency are industrious. There has been but very little sickness this year. One man died last winter, another has been in the hospital of the Halifax Poor's Asylum for several months; he got his feet frozen last winter. The children attending school are progressing very satisfactorily.

I have the honour to be, sir,
Your obedient servant,
D. O'SULLIVAN,
Indian Agent.

DISTRICT No. 2, STEAM MILLS, N.S., 13th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to inclose tabular statement and report for the year ended 30th June, 1895.

There is nothing new in this agency, the Indians maintaining about the same rate of progress as in other years. They are fairly industrious and seem to live comfortably for the most part, are intelligent and shrewd at a bargain. Owing to the depth of snow and severity of the past winter, and to a couple of old people, Joseph Francis and wife, becoming a total charge, it made the expense of maintaining the Indians of this agency a great deal heavier upon the department than ever before. Taking everything into consideration, I think they will compare favourably with others of their brethren.

I have the honour to be, sir,
Your obedient servant,
CHARLES E. BECKWITH,
Indian Agent.

CALEDONIA, QUEEN'S Co., N. S., 9th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to inclose my annual report, with tabular statement, for the year ended 30th June, 1895.

Beyond the information contained in my last report there is very little to note this year.

There has been considerable sickness among the Indians, in Lunenburg county especially, and a few deaths. However, as the births are in excess of the deaths, there is a slight increase in population.

The sanitary regulations are attended to. I find the interior of the Indian houses clean and well ventilated. In their habits, morals, and manner of living an improvement is apparent. Very few Indians, I am glad to say, use intoxicating drinks. No doubt the villainous stuff called liquor which is sold now in country places to Indians and others of the lower class of people has on account of its baneful effects disgusted many and helped them in a certain degree to become sensible and sober men.

The crops compare favourably with those of other years. I am in hopes they will thus be able to save the necessary amount of seed for next year's planting, and eventually rely more on their own exertions. I am pleased to say the Indians under my care are making steady improvement in all things tending to make them law-abiding citizens, as well as in the knowledge of the duties which they owe to God, to themselves, and to their neighbours.

I have the honour to be, sir,
Your obedient servant,

THOMAS J. BUTLER.

DISTRICT No. 14, YARMOUTH, N. S., 30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June, 1895.

The condition of the Indians in this agency remains much the same as stated in my last report.

There have been four births and no deaths, making the total population 89.

The amount granted by the department for the purchase of seed was carefully expended and seed was supplied to those living on the reserve only.

The crops so far are not looking well, owing to the drought.

The most of the men are during the summer employed on works within the town where they get good wages.

I have the honour to be, sir,
Your obedient servant,

GEO. R. SMITH,
Indian Agent.

DISTRICT No. 15, SHELBURNE, N. S., 16th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June 1895.

The Indians in this county are taking more interest in farming than in former years, and their crops look fairly well, their fences are in good condition, and their houses neat and clean.

A large number of Indians have been vaccinated.

There has been considerable sickness the past year.

A family returned last fall to this county, increasing the Indian population ten in number.

I have the honour to be, sir,
Your obedient servant,

JOHN J. E. DE MOLITOR,
Indian Agent.

DISTRICT No. 1 A.
ANNAPOLIS, N.S., 12th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report on the Indians of my agency in the county of Annapolis for the year ended 30th June, 1895, together with tabular statement.

There are very few changes to report regarding the Indians of this district. Some of them are making a comfortable living and improving their surroundings; others are shiftless and indolent. They are as a whole sober.

There has been some sickness amongst them; but only one death and one birth, which leaves the population the same as last year, eighty-two.

They had a fair crop of potatoes: they told me they dug seventy-five bushels; and the crop of the present year is looking well and has been very well cared for.

The public school at Lequille is a good one and kept in good order, and the Indian children are well cared for thereat.

The sanitary measures recommended by the department have been carried out; and the homes of the Indians are clean and comfortable.

I have the honour to be, sir,
Your obedient servant,

GEO. WELLS, SR.,
Indian Agent.

DISTRICT No. 1 B.
BEAR RIVER, DIGBY COUNTY, N.S., 19th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement in regard to the Indian affairs of this district for the year ended 30th June, 1895.

The Indians living on this reserve have made some improvement in their surroundings, having given more attention to cultivating their lands; they were much encouraged by getting a large yield of potatoes the last autumn, and by appearances there will be a larger crop this season.

They are much pleased, and very grateful to the government for the assistance in grafting their apple trees on the reserve, which are growing finely, and in a short time the result will be that where indifferent fruit once grew there will grow good fruit in its place.

The Indians were very fortunate in hunting the last fall and winter, having killed a great many moose, which helped them to live through the winter very comfortably.

The Indians on the reserve enjoyed very good health the last spring and winter, there having been but one death amongst them, but the Indians in the lower part of the country around Weymouth suffered from sickness, and wherever disease comes destitution follows, as they never make any provision for the future.

The Indian population of this district number to one hundred and seventy-nine (179), making four less than last year, accounted for by two families that are making their home in Annapolis County.

The school on the reserve, taught by J. L. De Vaney, is giving good satisfaction to the parents of the pupils and all others interested, and I am pleased to state that the parents take more interest in the school than formerly, and that some of the pupils would be a credit to any school.

The sanitary measures recommended by the department have been attended to, and the homes and surroundings of the Indians are clean and comfortable.

I have the honour to be, sir,
Your obedient servant,
F. McDORMAND,
Indian Agent.

TRURO, N.S., 21st August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June, 1895.

I have very little change to report among the Indians under my charge in this agency. A few deaths have occurred, but on the whole the Indians have been healthy and comfortable.

There is noticeable improvement in the appearance of the reserve, one new frame house quite tidy in its look having been erected, and others whitened and improved.

I have the honour to be, sir,
Your obedient servant,
D. H. MUIR, M.D.

NORTHERN DIVISION,
FREDERICTON, N.B., 17th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June, 1895.

Tobique Reserve

at the mouth of Tobique River in the county of Victoria, N.B., has a population of two hundred, an increase of six compared with report of 1894. There were seven births, and four adults and three children died from lung diseases during the year.

In taking the census of the band I found forty-one families at the Point. Most of these derive their living from the employment referred to in last year's report, namely, lumbering, stream-driving, &c. For working in the woods, wages range from eighteen to twenty dollars per month, and for stream-driving from one dollar fifty cents to two dollars per day, with board. Another employment that proves profitable to some members of the band is acting as guides to sportsmen; probably not less than five hundred dollars is earned at this work each summer. The remainder of the band engage in the manufacture of Indian wares and in farming. Their wares are readily sold at fair prices in the district and adjoining country. Excepting a few, the Indians are self-supporting.

Regarding agricultural pursuits, I have to report that two-thirds of the band give but little attention to this industry. They merely plant potatoes, &c., sufficient to meet their immediate wants. The other third of the band, however, are devoting more time and labour to this industry than in former years; for instance, in addition to the usual quantity of land farmed yearly they have this year broken up at least ten acres of pasturage land that had been in commons for years past. In addition to this they have also cleared some twenty acres of land that a year ago was a forest. All of the land referred to is farmed, the seed used being furnished partly by themselves and partly by the department. On the 17th of July last I inspected their crops, and with the exception of hay, which will be one-third less than that of last year owing to drought, the rest looks very promising. Since submitting my last report, these Indians have given considerable attention to the raising of stock. At present they have forty head of young and old horned cattle and eighteen good horses, and they are well supplied with harness, wagons, sleds and farming utensils.

With reference to sanitary measures to be enforced, and referred to in circular letter from the department of the 5th March last, I beg to report that in May last the Indians removed all refuse matter from their premises. Their reserve, from a sanitary view, is much favoured. The band is on an elevated plane, the buildings are quite a distance apart, and the water used for domestic purposes is taken from a spring of pure water a half-mile from the reserve. During the year, I am pleased to report, none of the band were visited with disease of a contagious nature.

The school at this reserve has been under the supervision of Miss Edith O'Brien for the past year. The school, when in session, is taught five hours each day, namely three in the forenoon and two in the afternoon. The number of pupils enrolled for the several quarters ranged from twenty-eight to thirty-seven, and the average attendance for the year was 17¾. The branches taught are spelling, reading, writing, drawing, arithmetic, geography, &c. A number of children attend regularly, and these are making fair progress; others who fail to attend regularly, very often through the indifference of their parents, are not so proficient in their studies. At all seasons of the year the health and comfort of the children are carefully provided for.

I have to report the erection during the year of one dwelling and three barns. One of the latter was erected by Chief Francis, its dimensions being thirty by forty feet. All of the buildings are properly framed, boarded, roofed and shingled. Several repairs have been made to dwellings, such as re-shingling, clapboarding and painting. Another improvement made that deserves mention is the repairs recently made to the church. This building has been enlarged and a new roof put on. The interior has been renovated by the removal of old pews and gallery, remodelled and painted throughout, and furnished with seats of the most modern style. Last fall the graveyard was inclosed by a new picket fence; and a similar fence is being put about the land surrounding the church. When finished, this and the fencing erected last fall are to receive two coats of white paint, and when completed will add very much to the appearance of the place. These improvements the Indians take great pride in.

The Edmundston Reserve,

situated near the mouth of the Madawaska River, has seven families living thereon. They number thirty-seven, a decrease of nine for the year, due to removal of two families to Tobique Point.

These Indians derive their living chiefly from hunting and the manufacture of Indian wares. They have an excellent block of farming lands, including high land and intervale, all well adapted for farming purposes. The band, however, with but one exception, prefer almost any other labour to this industry. They give their lands yearly to white neighbours to work on shares, receiving in return one-third of the crop raised. As a rule they keep very little stock of any kind, and convert their share of produce into provisions. By this and the industries referred to they maintain their families in a fair degree of comfort.

With the exception of an aged couple who were sick off and on all last winter, the rest of the band have had fair health. There were no deaths during the year, and but one birth. In closing my report I beg to remark in justice to the Indians of this agency that the great majority of them are a temperate, industrious and respected body of men.

I have the honour to be, sir,
Your obedient servant,

JAMES FARRELL,
Indian Agent.

SOUTH-WESTERN DISTRICT—1ST DIVISION,
FREDERICTON, N.B., 17th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to present my annual report and tabular statement for the year ended 30th June, 1895.

St. Mary's Reserve,

which is situated in the parish of St. Mary's, directly opposite Fredericton, N.B., has this year a population of one hundred and thirty-one, an increase of eight as compared with the return of 1894. The principal industry engaged in by those Indians is much the same as stated last year, namely, the manufacture of all kinds of Indian wares. Most of the articles made are disposed of in Fredericton and vicinity. Owing to the distance the Indians have to travel to procure wood for splints, &c., the prices realized are not equivalent to the labour bestowed on these articles, and often only affords a scanty living. A few of the more able-bodied men in summer engage in river employment, for which they receive fair wages. The majority are industrious and avoid intemperance. A few, however, notwithstanding the frequent prosecutions and admonitions, indulge in the use of intoxicants. As a rule they procure liquor through some worthless character. The men engaged in this business, by request and in fear of the fine likely to follow, will not sell intoxicants to Indians. Moreover, the police magistrate of Fredericton, Mr. Marsh, is ever ready to assist me in punishing severely any person convicted of supplying liquor to Indians.

For want of land the farming operations of the Indians are confined to gardens connected with their dwellings. Seven families received and planted seeds supplied last spring. Their gardens at this time are very neat, and from present appearance they will raise sufficient potatoes and vegetables to meet their wants to the 1st of January next.

Conforming to the instructions of the department these Indians removed all refuse matter from their dwellings and surroundings in the middle of May past. Dr. Vanwart and myself at this time visited them and insisted upon their being vaccinated, but failed to get them to consent. The Indians of this and other parts of the agency are decidedly opposed to vaccination. This is largely due to the effects of last vaccination. I am pleased to report that there was only one death during the year, and the births for the same period were seven.

The school for the past term was under the supervision of Miss M. I. Rush. Owing to the roving habits of the Indians, the attendance in the summer months is very irregular. In the winter season the attendance is much better. The branches taught are spelling, reading, writing, arithmetic, &c. Some of the children are very proficient in their studies, whilst others, for the reasons stated, are not making the same progress. The children are naturally very quiet and respectful in their manner.

The buildings are in good repair for the ensuing year.

Kingsclear Reserve.

There are twenty-four families residing on this reserve. The population is one hundred and seven. The births were nine, and deaths three, the mortality being confined to infants.

The sole industry engaged in by this band is the manufacture of Indian wares and farming. A few of the young men work in the woods in winter and hire at stream driving. Last year and this, fully half of the band left the reserve for watering places in the state of Maine and points between Fredericton and St. John. At these places most of the sales of Indian wares are made to tourists and visitors to the province. The most of the articles sold are fancy baskets, bead work, etc., for which it is said the Indians get good prices. They usually remain at this business until the approach of fall. Some of them who are experts at this business make considerable money, whilst others return about as poor as when going away. Frequently I advise them to remain at home, turn their attention to farming and other employment. They, however, think differently, and urge that the city market is overstocked with their wares, and that their families' pressing needs compel them to seek other markets.

The facilities for farming at this reserve are the best in the agency. The soil is good, free from stone and easily tilled. Last year all kinds of crops raised were a fair average. The hay crop, although a fine yield in all parts of the county, was light on the reserve, this being largely due to the want of proper manuring. This year the Indians who remained at home and showed an earnestness to farm as directed, received seeds, including buckwheat, oats, potatoes, beans, &c., to the amount of $187.56. They have this year, apart from hay lands, at least thirty-five acres of crop that at the present time looks well. The potato crop, the most useful, is, from all appearances, going to be the best that these Indians raised for years past. A few of the Indians are giving more attention to raising cattle, and they are realizing that to be successful in this line cattle must be kept on the land. It is very much to be regretted that those referred to in the first part of report would not follow the same example. If they did, their situation, I am satisfied, would be far better in time.

The sanitary measures ordered to be enforced by the department received due attention. The buildings and grounds are kept neat and clean. The district is fine for health, contagious diseases being seldom known. The health of the band for the past year was particularly good.

The school for the past year, excepting the September quarter, was under the supervision of Miss Francis McGinn. The teaching throughout the term was most satisfactory, and the pupils made rapid progress in their studies. The Rev. William O'Leary, resident priest, at all times manifests a lively interest in both the spiritual and educational affairs of the children, and to his influence must be attributed their regular attendance at school. The school building and furniture are well cared for by teacher and pupils.

Woodstock Reserve.

There are ninety-two Indians on the reserve and in the vicinity of Woodstock. The births were four and the deaths three.

All these Indians derive their living from the manufacture and sale of Indian wares, which are in good demand in the town of Woodstock and the surrounding country. The reserve, on which two-thirds of the Indians reside, is well adapted

for farming, but, as a rule, they pay little attention to agriculture, only a small quantity of potatoes and a few other vegetables with a little oats being raised. I have time and again advised the Indians to send their children to a free school about a mile distant, but my pleading is of no avail.

The great source of sickness amongst them arises from lung weakness, which, with more or less exposure leads to consumption and fatal results.

Regarding their habits I must confess that it is of rare occurrence to see an Indian intoxicated. Their habits in general are good and commendable.

The remainder of the Indians of this superintendency live at Oromocto, Sunbury County; Upper Gagetown, Queen's County; Apohaqui, King's County; Milford, St. John County, and St. Andrews, Charlotte County, N.B. These engage in much the same business as those of other parts of the agency. Their wares are always in good demand in the city of St. John and amongst farmers of the localities named. A few of their number work in saw-mills during the summer season, and for this work they receive fair wages.

The births amongst them for the year were seven and deaths two. The health of the Indians was fairly good. All were free from sickness of a contagious character.

The total births for all parts of the agency were twenty-seven and the deaths nine. The total population is four hundred and seventy-five, being an increase of twenty-three, which is in consequence of the births being largely in excess of deaths and of marriages that have taken place with Indians of Pleasant Point, many of whom have settled on reserves of this agency.

I have the honour to be, sir,
Your obedient servant,

JAMES FARRELL,
Indian Agent.

NORTH-EASTERN SUPERINTENDENCY, NEW BRUNSWICK,
RICHIBUCTO, 22nd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement concerning Indian affairs in this superintendency for the year ended 30th June, 1895.

Eel River, Restigouche County.

The condition of the band is much the same as described in my last report. The population has however increased from thirty-nine to fifty-two. This increase is due chiefly to migrations from other bands. Fishing and the manufacture of Indian wares are the principal pursuits. Agriculture receives but little attention owing to the poor and sandy nature of the soil. The cultivated portion consists of about five acres. A few barrels of potatoes and some garden vegetables were planted last spring.

Papineau Reserve, Gloucester County.

The Indians of this band are engaged chiefly in hunting, fishing and the manufacture of Indian wares. In the summer several of them make good wages in attending sportsmen and guiding them up the Nipisiguit River. Furs to the value of nearly four hundred dollars were taken last winter. There has been one death during the year. Population twenty-nine.

Burnt Church, Northumberland County.

The Indians of this band are with a few exceptions industrious and the majority of them in fairly comfortable circumstances. The soil is good, but more attention is given to fishing than to farming. Last spring these Indians acting under the instructions of the department proceeded to clean and whitewash their dwellings and outbuildings, and their premises present a neat and clean appearance. The health of this band has been exceptionally good. The church on the reserve is kept in good condition and greatly adds to the appearance of the locality. The school taught by Miss Borden is doing good work. The band numbers two hundred and three, a decrease of seven. The decrease has been caused by removal. Births during the year, nine; deaths twelve. At the election for chief of this band, held in June last, the retiring chief, Peter Joseph, was re-elected for another term.

Eel Ground, Northumberland County.

There has been a great deal of sickness during the year among the members of this band, and this, together with the failure of the bass fishery last winter, left many of them in very poor circumstances. A number earned good wages last spring in stream driving, and have since found employment in the lumber mills. Indeed with the excellent opportunities open to these Indians, there is no good reason why all those able to work should not be able to earn a comfortable livelihood. The soil is good. About one hundred and seventy bushels of potatoes, one hundred bushels of oats, and some garden seed were distributed among this band last spring. Measures were also taken to carry out the instructions of the department in removing and burning all filth and refuse matter collected around the buildings during the winter. The school on the reserve is taught by Mr. Flinne, a very efficient teacher. Population, one hundred and thirty-six.

Red Bank, Northumberland County.

I am pleased to report that the Indians of this reserve are in fairly comfortable circumstances. They have nearly all been engaged in lumbering and stream-driving during the winter and spring at good wages. They have since been engaged on their farms and at other occupations. The health of the band, except in a few cases, has been good. The population is fifty-six, an increase of five.

Big Cove, Kent County.

This is one of the finest reserves in the province and contains the largest population. The soil is good, and I am pleased to report that the band appear to be giving more attention to farming than they formerly did. The crops look well and promise a good yield. During the winter, fishing and the manufacture of Indian wares were the chief pursuits. Two or three of these Indians who were provided with nets did well at smelt fishing last fall, but unfortunately there are very few nets among them. Eel fishing and bass fishing were also engaged in. In summer many of them are hired in boats and engage in deep water fishing. Others find employment in the lumber mills and in carrying and loading deals. An election for chief last fall resulted in the re-election of Chief Tom Joseph. There is a fine church on this reserve and the pastor, Rev. Father Bannon, takes a deep interest in the welfare of the band. Population two hundred and seventy-two.

Indian Island, Kent County.

Fishing is the chief industry of this band. They are nearly all provided with boats, nets and fishing gear, and have been fairly successful during the year. Population, thirty-four.

Buctouche, Kent County.

There has been a great deal of sickness among these Indians during the year. The prohibition of oyster fishing through the ice has prevented them from engaging in that industry to as great an extent as formerly, and as a result there was much poverty among them last winter. The soil is fertile but not carefully cultivated. Population, twenty-five—a decrease of eight.

Westmoreland County.

The Indians of this county number ninety-four, of whom forty-seven are located on Fort Folly Reserve, sixteen at Shediac, and the remainder in and around Moncton and Salisbury. Some farming is done at Fort Folly, but the greater number of these Indians gain a livelihood by selling Indian wares and by begging.

King's County.

The Indians of Hampton number fifty-five, and are engaged in making and selling Indian wares and in begging. They live in shanties during the winter, and in summer move about from place to place.

There has been a great deal of sickness during the year amongst the Westmoreland and Hampton Indians, due, no doubt, to exposure caused by their wandering habits and poor dwellings.

The total population of the Indians of this superintendency is nine hundred and fifty-six. Some of them show a disposition to improve their condition and are making fair progress. Others are content to eke out a miserable existence. Most of them are peaceable and law-abiding. I have endeavoured to enforce the laws prohibiting the sale of intoxicating liquors to them and have succeeded to a certain extent, but I find it impossible to stop the traffic entirely. Consumption has been the cause of nearly all the deaths that have occurred during the year.

I have the honour to be, sir,
Your obedient servant,
WM. D. CARTER,
Indian Agent.

EGMONT BAY, P.E.I., 12th August, 1895.

To the Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my report, accompanied by tabular statement, for the year ended 30th June, 1895.

Nearly all the Indians residing on the reserve live in houses. Several of these houses are well finished on the outside and whitewashed.

On Lennox Island Reserve there are some good orchards of a superior kind of apple tree. These trees are still young; they have, however, begun to bear, and in a few years the owners of these orchards will be well repaid for their labour. I regret to have to say that the harvest this year will be under the average; the great drought in June and July greatly retarded the growth of cereals.

On this reserve a church is in course of construction. It will cost, when finished, nearly $3,500. For more than a quarter of a century the Indians have been saving up a fund to build this church; they have now in the savings' bank at Charlottetown nearly $3,000; they want only a few hundred dollars to finish it.

They got up a picnic on the 24th ultimo at Lennox Island, which attracted a large number of people. They realized nearly $200.

I am glad to be able to say that the Indians of this reserve are faithful to the temperance vows that they made several years ago.

The school, under the charge of Mr. Casimir J. Poirier, is doing well.

Morell Reserve.

There are five families on this reserve. These Indians are making good progress in agriculture; their lands are very good and well cultivated. They remain constantly on the reserve. Two of these families are well-to-do.

One of these Indians this summer bought a new carriage, for which he paid $60. He owns a fine orchard; each year he sells several barrels of apples.

I have the honour to be, sir,
Your obedient servant,
JOHN O. ARSENAULT,
Indian Superintendent.

INDIAN OFFICE,
REGINA, ASSA., 12th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following annual report for the fiscal year 1894-1895.

During the year I visited the following schools:—Sandy Bay, Dog Creek, Ebb and Flow, Water Hen and Pine Creek, in the Manitoba Superintendency, and Beardy and Okemasis, Duck Lake, Sweet Grass, Poundmaker, Thunderchild, Onion Lake, Beaver River, Blue Quill, Lac la Biche, Stony Plain, Alexander, Lake Ste. Anne, St. Albert, Ermineskins, St. Joseph, Piegan, Blood (2) and Blackfoot, in the North-west Territories.

Out of these, nineteen are merely day schools. The success in these fluctuates and is regulated principally by the attendance of the children. However good the surroundings of a school might be in accommodation, material or direction, a bad attendance is sure to mar its success, and often such is the case in the day schools. Otherwise there is not much to complain of. The teachers as a rule are well qualified. For years the houses have been improved upon, and are now generally equal, and occasionally superior, to similar buildings devoted to white pupils. The material provided is adequate to the wants, and good furniture is generally found.

The schools of Water Hen and Onion Lake are mixed day and boarding schools, although at my last inspection only the former received a special grant for boarders. The Water Hen School is an old school which has always done well and is keeping up its reputation. The Indians there are not numerous, but very good and well disposed towards the school. The benefit of the school is not only felt by the children, but also by the parents, a feature which strikes at once the visitors of this reserve. Only girls are accepted as boarders, and learn house work in its various branches.

The Onion Lake School became a boarding school two years ago and wonderful work has been done since. It was handed over to the Reverend Sisters of the Assumption, who have shown remarkable ability in training Indian children. Very good buildings have been erected, the expense of which has happily been reduced by the facility of getting lumber from the agency. Until the arrival of the sisters little progress had been experienced here, although the Indians were well enough disposed. The change in management has done so much that it is gratifying to see the great results arrived at in such a remote place, where everything excepting lumber is expensive, whether clothes, food or building material.

The schools of Duck Lake, Lac La Biche and St. Albert are practically industrial schools, except that instruction in mechanics is not yet advanced and that most of the outside teaching is limited to farm work and rearing of cattle and other stock.

The oldest of these, the St. Albert Orphanage, has existed quite a length of time, but has laboured for many years against serious disadvantages, especially the lack of an adequate income. This last has lately been removed in a considerable measure. This institution is one of the largest in the Territories. The class instruction is imparted in the same rooms and at the same time as it is for the white children, and the Indians profit a great deal by this. Besides the household duties, the girls learn to make bread and butter, to card, spin and weave, etc. The boys learn agriculture and the care of stock. One of the features of the institution is a brass band, which has greatly improved of late.

The Lac La Biche School was recognized by the department about five years ago and is doing very good work. This, as well as the St. Albert School, is under the care of the Reverend Sisters of Charity. The progress of the pupils is remarkable. Most of the boarders are girls, and learn household work. The few boys kept as boarders are, as a rule, very young and can attend only to light outside work. The buildings have been greatly improved in the course of the last two years and are quite adequate to the requirements.

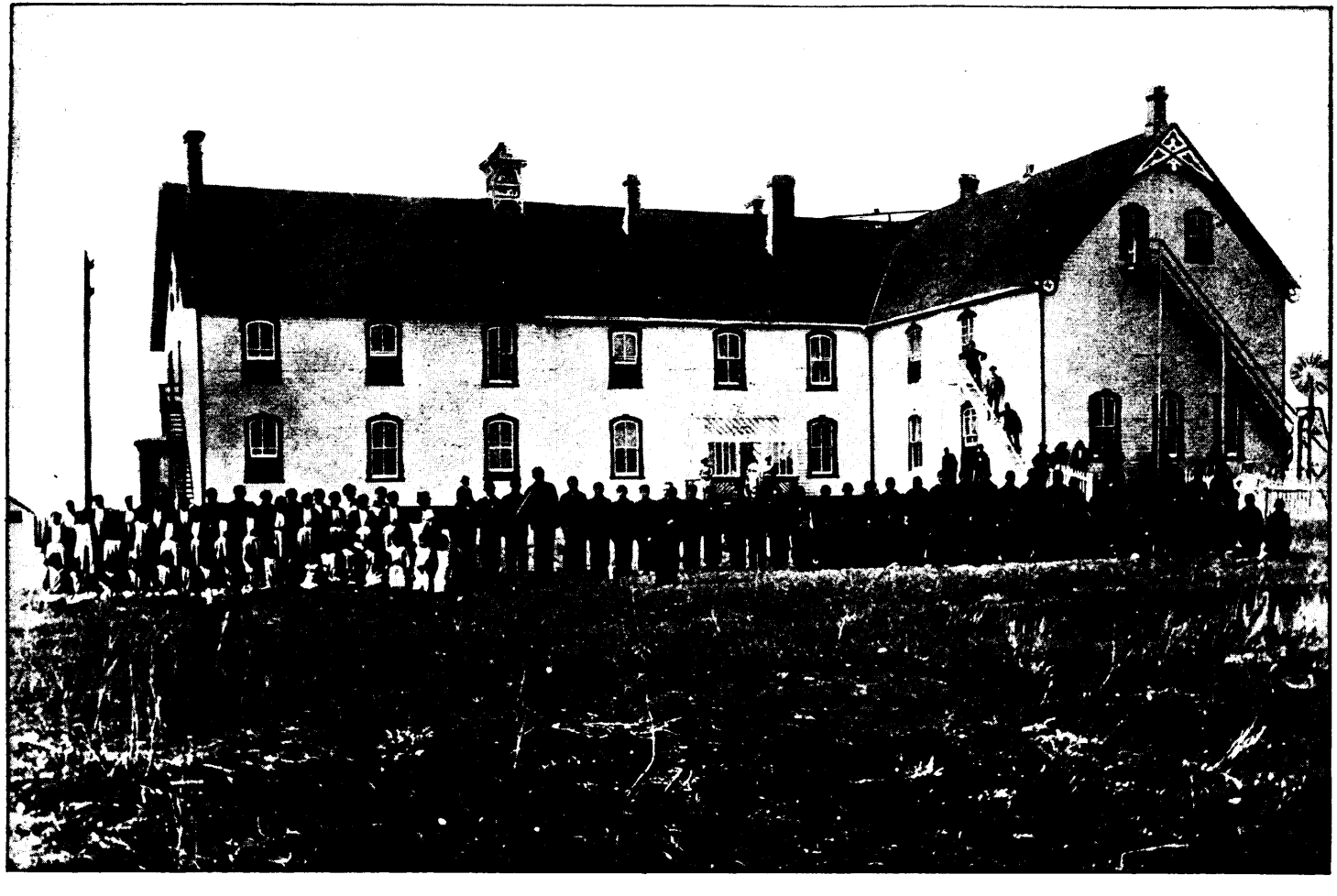
The Duck Lake School is the youngest of all the boarding schools, having been established not quite a year ago. The buildings are small and only twenty children had yet been received as boarders when I visited it. It had been opened only a few days before and was not yet in good working order. Even the staff had been selected temporarily. The principal, however, intended to have everything in good working order at a very early date.

The St. Joseph Industrial School is the largest school I visited for the purpose of inspection during the last fiscal year. This school is one of the oldest and has begun to show good results. The buildings had just been enlarged. It had its full number of inmates and the routine was excellent. Very good work is done in the school room and shops. The farming has never been very successful here, on account of the dry summers and hot winds. The gardens make up largely for this. The trades taught are blacksmithing, carpentering, farming and shoemaking. A good proportion of children are taught trades. All the children of adequate size learn farming, and also take care of the stock. The girls receive instruction in household work in all its branches.

There is a very good brass band here. At the late Regina Exhibition, which took place in the latter part of July last and the beginning of the present month, four Roman Catholic industrial schools were represented by pupils, exhibits, brass bands or otherwise:—Qu'Appelle, St. Joseph, St. Albert and St. Boniface. These obtained prizes in school work as against all the white schools in the Territories, showing that the training given in these schools is quite what it should be. The brass bands particularly attracted the attention of the public. They could compete with almost any white band at the fair.

I have the honour to be, sir,
Your obedient servant,

ALBERT BETOURNAY,
Inspector R. C. Indian Schools.



BATTLEFORD INDIAN INDUSTRIAL SCHOOL.

Department of Indian Affairs.

INDIAN INDUSTRIAL SCHOOL,
BATTLEFORD, 31st July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—In submitting to you the annual report of this school for the year ended 30th June, 1895, I must first of all refer to certain changes that have taken place.

The Rev. T. Clarke resigned the position of principal on the 31st December last.

The school was then taken charge of for the following three months by the Venerable Archdeacon John A. Mackay, of Prince Albert, whose ability, zeal and success in connection with the Indian work are so well known to the department, and for a portion of that period—when his duties in connection with the work of Emmanuel College required his presence there—the Rev. G. H. Hogbin acted for him here. My appointment to the principalship dates from 1st April last.

I also desire to bear cheerful testimony to the diligence, faithfulness and hearty interest in the welfare of the institution manifested by Mr. T. J. Fleetham, of the Regina office, who has been acting as clerk, and voluntarily doing many other duties in the way of advancing the best welfare of the school since the beginning of January last.

There has been a good deal of sickness during the year—quite a number of pupils being in the hospital all the time; some of these known to be incurable. There have been four deaths amongst the pupils—two boys and two girls.

The class work in the two school rooms has been conducted regularly; and there has not been any serious break in this department. The pupils are advancing steadily in the various subjects taught. For the last few months the pupils have been arranged in the two class rooms according to standards, instead of sexes, as formerly. This appears to work better than the old method. The two teachers are working energetically.

The pupils in the different trades are progressing favourably, and a great deal of work has been done by them in their respective lines.

For a large portion of the year there was no regular instructor for the blacksmith pupils, and the duties had to be temporarily performed by one of themselves. This interfered somewhat with the work of this branch. There is, however, a competent instructor now, and we hope for better progress, though he has to take the combined duties of farmer and blacksmith.

The carpenter pupils have had a regular instructor with them all the time, and have been doing well; their time, as well as that of their instructor, has been fully occupied in repairing the premises, erecting buildings and additions, and making numerous articles required about the premises. With a fuller supply of suitable tools a greater variety of work could be done, and very likely more custom work might be secured in future.

The paint shop has been and still is under charge of one of the older pupils, and the work done here is very creditable.

The shoemaker and his pupils have carried on their work without any serious interruption, and have made and repaired a large proportion of the shoes used in the school.

On the farm, the crops of the summer of 1894 may be said to have been a total failure; but I am thankful to say that this year the prospects so far are good. The season has been a very favourable one, so that the wheat, oats and barley, and all the garden stuff look very promising.

In the girls' department all is going on well. The matron, governess, seamstress, instructress, laundress and cook have their time well occupied, and are doing well with the girls in all branches of general housework. The baking for the whole school is done entirely by the girls. Those who are at service as "out pupils" are giving good satisfaction.

The carpenters, blacksmiths and shoemakers have lately made a large number of articles, in their respective trades, for the Territorial exhibition. These will

reflect credit on the pupils and their instructors, while the work of the painters may be judged by the painting and staining done on some of these articles.

The girls, under direction of the governess, seamstress and instructress, have also prepared a large number of articles for the exhibition, which are very creditable to both teachers and pupils.

The following new buildings and additions have been added to the premises lately: new kitchen and dining room built on to the hospital; new carpenter's shop, in the upstairs of which there is room for the shoemakers and printers; new implement shed; addition to the warehouse; while the room formerly used as a storehouse in the upstairs of the main building is being turned into a dormitory for the girls; new cottage for married employees—begun last year—is just about completed. A new well has been dug at the hospital, and the main well on the premises has been deepened. A new furnace is being put into the hospital, while the furnaces in the other buildings are being thoroughly overhauled and put into proper working order.

The bath and wash rooms, for boys and girls respectively, have undergone a thorough examination. New pipes and taps were put in to replace the old ones which were useless, and better connections made with the main sewer; thus adding to the comfort and cleanliness of the pupils as well as guarding their general health. A new floor has also been laid in the boys' wash room.

I am very thankful for the repairs and improvement that have been granted by the department.

On the whole I look forward hopefully to the future work, influence and usefulness of this school.

I have the honour to be, sir,
Your obedient servant,

E. MATHESON,
Principal.

INDUSTRIAL SCHOOL,
ST. BONIFACE, MAN., 25th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and inventory for the year ended 30th June, 1895.

The health of the pupils is fairly good. However, in three or four cases a tendency to consumption indicates itself. Scrofula also plays a prominent part among all other diseases. The girls appear more predisposed to it than the boys. Apart from the deaths which occurred, three pupils were discharged, Bedson Prince No. 5, whose conduct was very unsatisfactory, and Margaret Smith No. 058 and Caroline Raven (Penaissenquat) No. 043, both of whom are reported married. Bedson Prince is now living with his parents.

I am happy to state that the pupils in general are giving great satisfaction. The boys who are learning trades apply themselves not only to work but to work well. The farm is in a flourishing condition, and I am proud to say that it is due to the work of the boys under the supervision of the instructor. The grain, roots and vegetables look well and promise a satisfactory return. Considering the drought last year, I must say we had a good crop. We had only to buy about seventy bushels of potatoes. The supply of onions, carrots, beets, beans, turnips and corn was sufficient until a few days ago. The children relish all sorts of garden products.

Thanks to the liberality of the department, we have been able to erect a large ice house and root house; thus we shall be able to store up a sufficient provision of potatoes and vegetables for winter consumption. Last year we lost quite a quantity of beets and turnips for want of room.

During the course of the summer a number of repairs will be made, which I trust will give satisfaction to all concerned.

For the satisfaction of the department I think I can safely say that the children in general seem to be attached to the institution. They appear to appreciate more and more the advantages they receive from the government. I remark that the younger the children are placed in the school the more advantageous it is for them.

I have the honour to be, sir,
Your obedient servant,

SISTER HAMEL,
Principal.

EMMANUEL COLLEGE, PRINCE ALBERT, 23rd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my report of the school under my charge for the year ended 30th June.

The work of the institution has been regularly carried on during the past year. The regular routine is: study from 7.30 a. m. in summer and 8 in winter to 8.30, when the bell rings for breakfast. After breakfast the beds are made and the rooms swept, and there is a short time for recreation. School opens at 9.30 and closes at 12. Dinner at 12.30, and school again at 1.30 to 3 p. m. From 3 to 4 p. m. the pupils are at work getting wood and water, sweeping and tidying the rooms again and working in the stables or carpenter's shop. There is study again from 7 to 8.15 p. m.

All the work on the premises is done by the pupils, and the boys who milk the cows and attend the stables have to do this work so as not to interfere with their studies and class work.

As the department has now allowed us a grant for ten girls in addition to the twenty boys, we were able to extend our work by taking in that number shortly after the commencement of the year. The girls were all taken from the Montreal Lake and Lac le Ronge Reserves. They attend classes regularly with the boys, and are also taught sewing, knitting, cooking and general housework.

As a rule, in past years we have been remarkably free from sickness, but towards the close of this year we have had an exceptional experience in the development of tubercular disease among our pupils. One girl died in the beginning of June, and three boys were allowed leave of absence under medical certificate, in the hope that the change might prove beneficial.

All respectfully submitted.

I am, sir, your obedient servant,

J. A. MACKAY,
Principal.

MOOSE MOUNTAIN INDIAN AGENCY, ASSA.,
30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following annual report on Indian affairs in this agency, together with tabular statement and list of government property in my charge at this date.

The following bands are settled upon reserves in this agency:—Pheasant Rump's, Striped Blanket's and White Bear's.

Pheasant Rump's and Striped Blanket's Bands of Assiniboines occupy reserves Nos. 68 and 69, which are situated adjoining one another near the west end of the Moose Mountain, and about half way across the mountain from north to south.

There are a few square miles of poplar bush on the east part of these reserves; and a considerable area of good arable land, with large bluffs of poplar and wild fruit bushes and small lakes and hay sloughs, lies next to the timber, while much of the western portion is bare of timber and with many small gravelly hills.

The houses and farms of the Indians are well situated in the most picturesque and fertile part of the reserves, the houses and stables being built in the shelter of poplar bluffs near lakes, where their cattle are watered in winter; and usually their vegetable gardens are beside their houses, while most of their grain fields are a short distance to the west, on an open plateau. The soil is rich but not quick, and requires a fairly wet season, and the grain is later in ripening than in the settlement on the prairie south of the mountain.

Farming has become the main means of support of these bands, and has been prosecuted industriously for some years past and with varied success, their crops having been destroyed by hail twice within a few years.

Notwithstanding such discouragements their efforts have increased rather than diminished, and, although the bands are weak in able-bodied working men, there being only nine at present living on Pheasant Rump's Reserve and six on Striped Blanket's Reserve, a considerable amount of work has been accomplished, as will be seen from the following brief statement of their farming operations during last season and this spring:—

1894.

Ninety-seven acres summer-fallowed, ploughed twice; one hundred and forty-seven acres sown in wheat; ten acres oats sown; eight acres barley sown; four acres potatoes planted; five acres turnips sown; one acre gardens planted.

The following crops were harvested:—

One thousand four hundred and fifty-three bushels of wheat, one hundred bushels of oats, one hundred and twenty bushels of barley, four hundred and fifty-nine bushels of potatoes, five hundred and ninety-five bushels of turnips, and three hundred and thirty tons of hay stacked.

1895.

One hundred and thirteen acres summer-fallowed; one hundred and seventy acres wheat sown; thirteen acres of oats sown; twelve acres of barley sown; six and a half acres of potatoes planted; five and a half acres of turnips sown; two and a half acres of gardens planted.

Their grain was threshed by themselves with the threshing machine purchased by them in 1893, the power being supplied by their own ponies. The grain was of good quality, the wheat being uniform and very little inferior to that grown on White Bear's Reserve, which won first prize at Cannington show in open competition.

In the Indian class at the Regina exhibition first prize for barley and third prize for oats were awarded to members of Striped Blanket's Band.

Their farm work was well done, their gardens weeded and thinned, their ploughing fairly well done, their hay and grain well stacked, fenced and fire-guarded.

The following disposition was made of their wheat crop:—seventy-two bushels returned to the department to replace seed loaned to them; two-hundred and eighty-seven bushels used for seed; two-hundred and twenty-nine bushels sold to purchase clothing, etc.; nine-hundred and thirty-two bushels gristed, and flour consumed by them.

This supply of flour of their own raising rendered it unnecessary to issue any to them while doing their own work, and the total issues to the bands made under exceptional circumstances, as when hauling wood for the use of the farmer, amounted

from 31st October, 1894, to 31st May, 1895, being seven months, to eleven hundred and sixty-seven pounds.

They had an ample supply of potatoes and turnips for their own use, and some to spare after planting in 1895.

Cattle raising is one of the most important industries of these bands, and a great deal of attention has been given to making it a success.

The Indians are naturally very careless about stock, being used to their own ponies wintering out, and it requires endless patience and persistent watchfulness to educate them to winter stabled cattle properly, but I am pleased to be able to report as a most satisfactory indication of real improvement that never during any winter before have the farming instructor and myself had so little trouble to prevent their neglecting to get their cattle all stabled at night, and properly fed and cared for.

Their stables were all well plastered with mud, and roofed, fitted with stanchions, kept clean, with good stacks of hay fenced in beside each stable. The water holes were kept open, cut properly with safety trenches around them, and there was not a single casualty during the year excepting the death of one ox this summer from some disease resembling lumpy jaw. There was a considerable quantity of hay left over in the spring.

The cattle which they are working are all of their own raising and breaking, and some of these Indians are exceptionally skilful at training steers to work, their greatest fault in the handling of oxen being the rapid rate at which they drive on the road when not under supervision. The oxen trained by themselves, however, do not suffer from this as others would.

Their cattle are all grade shorthorns of good quality, and the herd will compare favourably in appearance with any in the adjoining district.

A Galloway bull was placed with the herd on Striped Blanket's Reserve during the past year.

Last fall they butchered for their own consumption 12 animals, and so far this summer 22 calves have been born, the herds now numbering on Pheasant Rump's Reserve, 20 oxen, 19 cows, 15 steers, 7 heifers and 10 calves; and on Striped Blanket's Reserve 15 oxen, 18 cows, 13 steers, 5 heifers and 12 calves.

The cattle are all branded, and to prevent loss by straying or damage to crops and to facilitate the regular milking of cows, are usually herded during the day and coralled at night during the summer.

As the Indians were well supplied with their own beef, it was unnecessary to issue any beef or bacon to them during the winter, excepting when rendering services to the department, for which they are not paid, excepting so far as a ration of flour and meat may be considered payment. The total issues to these bands from October 31st, 1894, to April 1st, 1895, of beef and bacon amounted to 638 pounds.

Situated as these Indians are, too far from any purchasing centre to be able to sell wood or hay, it is not so easy for them to earn money as for some who have a good market within reach; but by dressing cowskins for neighbouring farmers, making skin coats and similar articles for sale, and gathering wild fruit and seneca root, they help to support themselves. With these differerent resources, and some assistance from the department, mainly during haying, they live comfortably.

There were plenty of rabbits last winter, some deer were shot, and in the fall prairie chickens and ducks were plentiful, and during the open season a number were shot, but since the game laws have been extended to these Indians the close season has been well kept.

During the summer they all live in tents; and, although this tends to keep them from making as rapid advances in civilized in-door customs, the gain in health more than offsets that drawback.

It is seen to that their tents are frequently moved to fresh ground, and their surroundings kept clean.

In winter they live in warm log houses, well heated by open fire places which admirably ventilate them, for which reason the use of stoves is discouraged.

Their houses are not as large as is desirable, their custom of abandoning a house upon the death of an inmate making it difficult to effect rapid improvement in this direction and in fact it requires constant effort to prevent them putting up small rudely built log cabins with the idea of abandoning them after a winter's occupation.

A decided advance has, however, been made during the past year and all their houses are now good of their class and are kept clean and whitewashed inside and out, and dirt is not allowed to accumulate outside.

They sleep on raised beds of their own construction and have enough blankets for comfort.

Most of the houses are floored, their tools, clothing etc., are hung around the walls, their household utensils and crockery kept clean, and neatly put away, and having no experience of nor desire for any greater convenience or comfort, it will be some time, I think, before there is any marked change to report in the appearance of their interiors.

The men are now almost invariably dressed like white men, or nearly so, and look clean and tidy.

The women wear a plain short gown with leggings and a shawl for head covering, and are clean and neat in appearance, and in my opinion would not look so well if they were to attempt a much closer imitation of their white sisters' manner of dress.

There are very few children in these bands, and only fifteen of school age, of which number nine are attending the industrial schools at Regina and Qu'Appelle.

The health of these Indians during the year has been generally good, the births numbering four, against six deaths, of whom three were old women, one said to be over one hundred years of age.

The agency headquarters were formerly situated on Striped Blanket's Reserve and the farm in charge of Pheasant Rump's and Striped Blanket's Bands. Mr. Charles Lawford now resides there in a convenient situation for the supervision of both bands, occupying the old agency house near the northern boundary of the reserve.

At the farm is a blacksmith shop, in which the farmer does much of the repairing of the Indians' farming implements, an implement shed, a storehouse, from which such provisions as are necessary are issued to the Indians and in which they store their winter's beef, a granary, in which the Indians of both bands store their grain, each man's wheat being in a separate bin, an ice house for storing meat in summer, and stables for cattle and horses.

The lack of good drinking water was always much felt, none of the several wells dug in the past having been satisfactory, but last winter, with a government borer, good water was found at a depth of about forty feet, a few yards from where dry wells ninety feet deep had been dug, and during the winter a well was dug.

The lakes in this vicinity have steadily become shallower year after year until during the latter part of last winter it was necessary for the Indians of Striped Blanket's Band to drive their cattle a long distance to water. It was, therefore, a great boon when, with the government borer, good water was found in several places convenient to the Indians' houses as well, and at moderate depths, so that the Indians were able to dig the wells themselves, a task which they much dread and dislike.

White Bear's Band, composed of Crees, Chippewas and Assiniboines, occupies Reserve No. 70, situated at the south-east corner of the Moose Mountains.

The northern part of this reserve is timbered, with one lake of an area of about four square miles, in which jackfish and pickerel are found, though not in abundance, and many small lakes, in which there are no fish.

I have applied to the Fishery Department for whitefish fry with which to stock their larger lake, as the Indians would be much benefited, and, if the experiment proved successful, other lakes in the mountain could be stocked, from which the surrounding settlement might be supplied in the future.

South of the timber there is a hilly section, with bluffs and small lakes sloping gradually to the prairie and becoming more level and suitable for agriculture in the south-eastern part of the reserve.

There the Indians are now settled, their houses being built in small groups or singly, in the shelter of woods, and within a convenient distance of the agency for purposes of supervision.

The convenience of a good supply of water for stock has to be considered in selecting their winter quarters; and, therefore, excepting in one case, their gardens and fields are a little distance from their houses in the more open country.

Farming does not occupy so important a position as a means of livelihood in this band as in the others, there being other resources available as well, and the area of land under cultivation has therefore been more gradually increased, it being necessary on account of the proximity to white settlement to fence each field, and these Indians having been opposed to farming and requiring much effort to induce them to prosecute it.

Although the area cultivated has been small, the work has been well done, and great attention has been paid to the growing of potatoes, turnips, onions, corn, etc., and the results of this method of working have proved satisfactory.

If the price of wheat continues as good as at present, the grain area will be increased more rapidly.

The following is a statement of the farming operations during last year and this spring:—

SEASON 1894.

Twenty-one acres of new land broken.
Sixteen acres of wheat sown.
One acre of oats sown.
Six acres of potatoes planted.
Three acres of turnips sown.
One and a half acres of gardens planted.

The following crops were harvested:—

Two hundred and fifty bushels of wheat.
Thirty bushels of oats.
Four hundred and sixty-six bushels of potatoes.
Three hundred and eighty-two bushels of turnips.
Sixty bushels of carrots, onions, etc.
Three hundred tons of hay stacked.

SEASON 1895.

Thirty acres of wheat sown.
Seven and one-half acres of potatoes planted.
Three acres of turnips sown.
Two acres of corn planted.
Two acres of gardens planted.
Three hundred tons of hay stacked.

Their grain was disposed of in the following manner:—

Two hundred and twenty-one bushels of wheat gristed.
Fifty bushels used for seed.

Their farm and garden work was well done and their gardens were particularly praised by all those who saw them.

Their wheat was uniform in quality, and a sample of it won first prize in open competition at the East Moose Mountain Agricultural Exhibition, beating the wheat which had won first prize at the Carlyle Exhibition; and in the Regina Exhibition where it was only shown in the Indian competition it won second prize, the first prize wheat having also won first prize in the open competition.

At this exhibition they also won first prizes for potatoes and corn, second prizes for domestic sewing and carrots, and third prizes for wheat and bread.

Their fields are again looking well in comparison with those in the adjoining settlement and their gardens better than most, being particularly well hoed and free from weeds.

It is only just to them to mention that several gentlemen who have recently visited the reserve, from different parts of the country, one of whom had driven about eleven hundred miles through southern Manitoba, said that some of the Indians' gardens excelled any that they had seen anywhere.

As the grain in this district is not so far advanced as in most other places, this superiority of the Indian gardens can only be due to thorough cultivation and careful attention.

The issue of flour to these Indians during November, December and January amounted to only six hundred and ninety-two pounds, being mostly for firewood, etc., for agency office, etc.

Their herd of cattle is doing well, numbering over one hundred; the increase of calves this year being twenty-two, and the quality of the cattle good; a cattle buyer travelling for a large exporting firm having recently remarked to me that it was the best looking herd he had seen in the district.

A Galloway bull has been in use for two seasons, and the result is very satisfactory. With the exception of this young stock, the cattle are grade shorthorns.

The remarks which I made regarding the stables, supply of hay, care of cattle branding, herding, etc., in reporting upon Pheasant Rump's and Striped Blanket's Bands apply with equal truth in the case of this band, and there was not a single casualty during the year.

These Indians derive much of their support during the winter from the sale of firewood, poles and logs, either cut and piled in the woods or drawn out to the agency or to the settlers' houses.

No green wood is cut upon the reserves and the removal of the dead wood killed by former fires improves the growth of young trees and lessens the danger of injury to them from fires, while at the same time providing the Indians with profitable employment.

The Indian women of this band dress a large number of cow robes for the farmers throughout the district and obtain so much of this work to do, that with their household duties and some washing and scrubbing for white settlers, berry picking, seneca root digging, gardening, &c., their time is fairly well occupied, and less attention is paid to knitting &c., than would otherwise be the case.

What I have reported regarding the tents, houses and dress of the other bands in the agency may be considered as descriptive of White Bear's Band, excepting that a few of White Bear's Indians had not as good houses as the others, nor were they as well kept inside, but new sets of logs were taken out by them last winter with which much better houses are to be built next autumn, and some of those whose houses are already good of their class have taken out logs to build additions to their present houses, which in one case will give the man a three roomed house.

There are fifty-three children in the band, twenty-five of whom are of school age and of this number nine are attending the industrial schools at Regina, Qu'Appelle and Elkhorn.

An Indian missionary came to work among the Indians of the three bands last summer, but only remained a short time, but it is expected that his place will soon be filled.

The behaviour of the Indians has been good and as usual I have not had a case of drunkenness to deal with, nor has there been a case in the agency during the past nine years.

As an instance of the steady change taking place in the ideas and customs of the Indians, I might mention that, whereas a few years ago upon the occasion of a death of a near relative an Indian would give or throw away all his or her clothing, wrap himself in some old garment which a friend would then give him, cut his hair and allow it to hang uncombed about his face, cut gashes in his legs and allow the

blood to dry upon the skin and remain unwashed and unkempt during the period of mourning, transforming a respectable looking man or woman, into a pitiable and disgusting object, the rule now is for them to content themselves with cutting off some of their hair, and wearing older clothes than usual, but to keep themselves clean and neat, washing regularly, combing their hair, and no longer cutting themselves, or if they do, decently clothing their legs so that it is not seen.

Their health has been good, as a rule, during the year. In cases of sickness requiring medical attendance, Doctor Hardy, of Cannington Manor, has visited them. There have been ten births and only eight deaths, being an increase of two as compared with an increase of three in the previous year.

None of these bands has a chief now, none having been elected to replace the deceased chiefs, whose names are still used to describe the bands.

I frequently, during the year, wrote letters for Indians of each band to relatives residing in the United States, and it was satisfactory to note the strong language they always used in speaking of the comfort, prosperity and contentment in which they were living.

During May a timber fire started in the mountain, and, before discovered, had gained such headway that, although a large number of settlers and all the Indians fought it steadily night and day, and were able to stop its further spread in many places, a large area of timber was destroyed before a sufficiently heavy rain fell nearly extinguishing it, leaving little to be done to make it safe.

The Indians of White Bear's Band worked splendidly, both while the fire was still at some distance from their reserve and after it had reached it, and were able to stop it from crossing the fire-guard between the Great Fish Lake and White Bear's Lake, thus saving a large area of timber. My duties as forest ranger in connection with this fire occupied me for fourteen days, part of the time both night and day, and of Interpreter Murison and the Indians for about half that time, interfering, of course, very much with farm work, and lessening the amount of breaking which would have been done.

The agency headquarters were removed in 1890 from Striped Blanket's to this reserve, where they are pleasantly and conveniently situated, both for general supervision of all the bands and the transaction of the business of the agency with the outside world, as well as the daily detailed supervision and management of all the Indians' farm and other work which is usually more peculiarly the work of a farming instructor where one is employed.

An ice house and a good well are the two principal improvements to be noted about the agency.

The staff of employees consists of Mr. H. R. Halpin, agency clerk, who is competent and hard-working and fulfils his manifold duties very satisfactorily; Mr. C. Lawford in charge of Pheasant Rump's and Striped Blanket's Bands, who is an old experienced employee, and Mr. Wm. Murison, interpreter, who gets along well with the Indians and, besides his general work about the agency, spends much of his time supervising and assisting the Indians.

In conclusion I may say that the general results of the year's work have been satisfactory. The Indians have made distinct advances in civilization, have lived comfortably and peaceably; and the value of the distributions to them of clothing, implements, ammunition and food, including what was given to them for supplying all the wood and hay required by the department at the agency and farm, and performing many other services of like nature for the department, such as scrubbing office, sawing wood, ploughing agency and farm fire-guards, cleaning premises, whitewashing government buildings, work in connection with growing and harvesting crop of oats and barley for farm team, and hauling manure, amounted during the year to $1,308.83.

I have the honour to be, sir,
Your obedient servant,

J. J. CAMPBELL,
Indian Agent.

RAT PORTAGE, ONT., 30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report for the year ended on the 30th June, 1895, as follows:—

In July I visited Frenchman's Head, Wabigoon and Savanne Agencies, vaccinating all who required it. Upon my return to Rat Portage I visited Assabaskashing and remained there during the payment, vaccinating, when necessary, and attending to all who required treatment.

In August I was summoned to Ingolf to attend an Indian who had been run over by a ballast-car. Upon my arrival there, I found him lying by the side of the railroad track with both legs broken. I erected a tent over the man, set the bones, and gave the treatment usual in such cases. After about six weeks he was able to walk with a scarcely perceptible limp.

In September, I made several visits to the Indian mentioned in the last paragraph and also visited Shoal Lake to attend the chief, Shi-shi Guse, whom I found suffering from an attack of pneumonia. I remained there a day and a night, and when I left, he was recovering. All who needed it were treated by me before leaving.

In October I was sent for to attend a squaw at Islington, who had an acute attack of hemoptysis. I arrested the hemorrhage and finally cured her, after which I went to Whitefish Bay, where I found a number suffering from sore throat. I attended to them and left medicine with the Hudson Bay Company's officer. During this month I also visited Shabaskong, Buffalo Bay, Assabaskashing and Gull Bay, where I attended to all who needed my services.

In November and December, I did not visit any of the reserves, owing to the unsafe condition of the ice.

In January I received a message to go to Islington, and upon my arrival there, I found a large number of children laid up with whooping-cough. I stayed one day with them, and when leaving, left medicine with a missionary, the Rev. J. McGraw, with full instructions as to when and how it should be applied. On my way back I visited the Dalles. A message was awaiting me when I arrived at Rat Portage, summoning me to Wabigoon. immediately left for that place, and upon my arrival I found Chas. Gilbert sufferIng from an attack of hemoptysis. I stayed with him about twenty-four hours, and successfully overcame all real danger, after which I departed, leaving instructions with Mr. Johns how to administer the medicine. The patient had completely reciovered a few days later.

In February I went to attend a child living about four miles north of Cross Lake, who had an abscess upon the hip. I operated and the child recovered. On the eleventh of this mouth I went by dog-train with Indian Agent Pither to the reserves on the Lake of the Woods, visiting Shoal Lake, North-west Angle, Buffalo Bay, Hungry Hall, Big Island, Shabaskong, Whitefish Bay and Yellow Girl Reserves, where I attended in each instance to all who required my services. On my arrival in Rat Portage, I received instructions from the department to visit Butler—a way station near Savanne. I left immediately and arrived there during the night. Procuring the assistance of a section-man, I walked out on snowshoes to the camp of the Indians, where I found a most pitiful state of affairs. The camp was composed of thirteen souls all told, but one had died before my arrival. Eleven were prostrated by la grippe; a young boy who had escaped the disease thus far had to procure wood, water, &c. They were completely out of provisions, so I despatched the section-man to bring a few necessaries without delay, till I could communicate with Agent McIntyre to send supplies. I had the satisfaction of seeing them all recover.

In March I was sent for to visit some sick children located about ten miles south of Hawk Lake. I found a number suffering from chicken-pox and sore throat. They all recovered eventually.

In April and May travel was an impossibility, on account of the breaking up of the ice.

In June I visited Wabigoon, Savanne, Frenchman's Head, Lac Seul and all other stations, where I attended all who were sick. At Lac Seul and Wabigoon I left a supply of simple medicines with the school teacher, to whom I gave all necessary instructions as to their use. At Wabaskong I found an almost clean bill of health, one case of hernia (which I reduced temporarily until I could procure a truss) being the only case I found. At Grassy Narrows there were several cases of coughs and colds and one serious case of paralysis. At White Dog and One Man's Lake I treated a few cases of malarial fever, one bad case of necrosis of the elbow joint, where amputation will be necessary, and a case of crushed ankle, the latter also requiring amputation. Both cases have promised to come to Rat Portage, where I will be able to secure an assistant surgeon to administer chloroform.

I have visited all the houses of the Indians and given instructions in sanitary and hygienic matters, which they have promised to obey.

At the present time I am not aware of any contagious or infectious diseases on any of the reservations.

I have the honour to be, sir,
Your most obedient servant,

THOS. HANSON, M.D.,
Medical Officer.

PORTAGE LA PRAIRIE, 5th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit for the information of the department my annual report with tabular statement showing the state of the Indians under my charge with an inventory of all government property and the approximate value of the same for the year ended the 30th June, 1895.

I have to report with pleasure that there is a marked improvement in many of the Indians of my agency in regard to farming, as they have taken a greater interest this year than ever before.

The Roseau River Bands.

On the Roseau River Reserve proper eleven men of these bands put in one hundred and twenty-seven acres that had been formerly under cultivation and a large portion of the land had to be ploughed in the spring. They got it in in pretty good time, and at the time that I was making the annuity payments in the first week of July the crops looked very well; one hundred and fourteen acres of this is in wheat and thirteen acres in barley. They also planted seventy-two bushels of potatoes and paid for the seed themselves. At the rapids of the Roseau River they put in but very little crop. The chief of this band other years put in the most of the crop, but the chief had been sick all winter and spring; consequently he got in no crop but a few potatoes; one other man put in eight acres of wheat and three acres of oats and quite a quantity of potatoes and corn, and another man five acres of wheat; and quite a number of them have potatoes and corn. At the time I was making the payments these Indians had sold to three dealers in snake root (seneca) eleven thousand pounds which averaged them seventeen (17) cents per pound and the snake root season was not half over.

The Long Plain Band.

These Indians are doing very well this year: they have in about eighty-five acres of wheat, four acres of oats and four acres of barley besides their potatoes and some

corn and they are summer-fallowing a portion of their light sandy land that had been cropped for a number of years and required rest. Their crops looked well when I was paying them their annuities. These Indians have not the advantage of the snake root that the Roseau River people have, but after they got their crops in they spent a couple of weeks digging the root and supplied themselves with provisions.

The Indian Gardens.

A few of the Indians who remain at the Gardens are doing very well. The chief, Yellow Quill, his two sons, and Kenoomootye are the only ones who farm on the Gardens. Yellow Quill has twenty-five acres of wheat, one of his sons has eighteen acres, and the other has nine acres, and Kenoomootye has sixteen acres of wheat. The wheat is a very fair crop and their potatoes and garden stuff looked very well. The chief's youngest son has broken about eight acres of new land.

The Swan Lake Indians.

The Indians on this reserve have done wonderfully well this year; they have in altogether ninety-three acres of crop besides what they have under potatoes and gardens, and, if nothing happens it, they will have a yield of forty bushels to the acre off thirty acres of it and the balance will average from twenty to thirty bushels per acre. This season has been very suitable for this land, as it lies pretty high and the soil is a little light and gravelly. This crop will run close on twenty-two hundred bushels if no frost or hail strikes it. They had twelve or fifteen acres of new land broken on this reserve when I was there and were still intending to break more. I may say that all through the payments this year I never saw the least sign of liquor among the Indians, and there was a very large number of strangers visiting them from across the line. There were about three hundred strangers at the Roseau River and quite a number at Swan Lake.

Although there was considerable sickness among them last winter I heard of very little among them at the time of making the payments. The deaths exceeded the births by four.

The cattle on all the reserves this year looked better than I ever saw them before and a number of the Indians are busy making hay for them on the several reserves where it is dry enough to work at it.

I have the honour to be, sir,
Your obedient servant,

FRANCIS OGLETREE,
Indian Agent.

RAT PORTAGE AGENCY, 30th July, 1895.

The Honourable
The Superintendent-General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement for the year ended 30th June, 1895.

The Indians on the several reserves in this agency are in a fairly prosperous condition, and still self-supporting, with the exception of a few aged and infirm Indians who still receive assistance during the winter. Some of the bands lost their seed potatoes by frost, and 100 bushels were supplied to them for seed. The land on the reserves in this agency is not favourable for farming; it is rocky and boggy, with occasional fertile land, but of no great extent. Consequently they plant corn and potatoes only and a few garden seeds.

The schools were visited in February, and again in June. The attendance has been more regular, and a slight improvement is noticed. The great drawback always is the irregular attendance: the parents leave the reserve for the purpose of hunting, fishing, rice-making and gathering berries, and of course the children accompany them.

The general health of the Indians has been good, and they have made fairly good hunts of fur-bearing animals.

There have been 34 deaths,—15 adults, 12 boys and 7 girls; and 42 births,—20 boys and 22 girls. The several bands have carried out the sanitary regulations of the department, and Dr. Hanson visited all the bands in February.

There is a prospect of the rice crop being good, as the water in the lake is not unusually high, and every prospect of a good hay crop.

I have the honour to be, sir,
Your obedient servant,

R. J. N. PITHER,
Indian Agent.

ASSINIBOINE AGENCY,
INDIAN HEAD, TREATY No. 4, 7th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended 30th June, with tabular statement and inventory of all government property under my charge.

I have much pleasure in being able to report that these Indians are making rapid progress towards civilization, having given up some of their old customs. A general improvement may be observed around their dwellings. The Indian women and children have the appearance of care and attention.

These Indians worked hard last fall. They put up six hundred and fifty tons of hay for their cattle, cut, bound and stacked one hundred and forty-one acres of wheat. All this binding was done by hand. Some of the grain was cut with sickles, and some of the hay with scythes. This kind of hard work will show what Indians can do when encouraged by pointing out to them the benefit they will have during winter of a good supply of both beef and flour of their own raising.

The following grain and roots were harvested in good order last fall. The yield was small, owing to hot winds during the months of July and August, but what wheat these Indians had was a very good sample.

Their root crops were very good for a dry season.

Wheat, five hundred and twenty bushels.
Oats, one hundred and twenty-five bushels.
Potatoes, one thousand one hundred and forty-five bushels.
Turnips, two thousand one hundred and forty bushels.
Carrots, two hundred and twelve bushels.
Onions, sixty-two bushels.

There was also a large amount of small garden stuff, which was consumed during the summer months.

It is a pleasure to be able to report that these Indians gathered their wheat crop as clean as possible last fall, which was hard work owing to the straw being short, but in many cases the Indian women and children did a large amount of gleaning. In this way they saved all their crop, and this shows a marked improvement in their industrious habits.

The following crops were sown and planted by these Indians last spring, and are now looking well:—

Wheat, one-hundred and eighty-one acres.
Potatoes, twenty acres.
Oats, fifteen acres.
Turnips, twenty acres.
Garden, seven acres.
Carrots, three acres.
Onions, two acres.

This land was properly prepared and seed sown at the proper time, and all has been well fenced.

We have had a very backward spring here, having no rain until the 1st of June, but since that date we are having plenty of rain and all crops are now looking well and, unless something unforeseen occurs, these Indians will reap a good harvest.

The root crops on this reserve are all looking well and promise a good yield. I may say that potatoes and turnips are a great benefit to my Indians, giving them a good supply of fresh vegetables during the winter months, and this helps to keep them in a healthy condition and adds to their food supply.

These Indians are doing all in their power to help to support themselves and families. I may state here that when these Indians were taking up their potatoes last fall they handed over to me three hundred bushels, to be kept for seed this spring, thus showing what intelligent progress they are making. The balance of their potatoes, with other roots, were stored in their own root houses for winter use. These vegetables, with flour of their own raising, also beef, mutton and poultry and some rabbits, are found to be a great help in keeping down the issue of rations from the government store-house. Many families had their own flour during the past year for ten months, and one family has yet on hand three sacks of flour of their own raising from last year's crop. The same man has 25 acres of wheat this year looking well.

The old people, widows and orphans, have to be assisted with both food and clothing the most of the year. These old people pick some fruit in the summer for winter use.

The following Indian families were almost self-supporting during the past year which is encouraging:—

Geegus,	Hop-po-coy,	Moon Face,
Dry Walker,	E-chas-Ho,	Crooked Legs,
Carry-the-Kettle,	Dragon Fly,	E-chas-Abby,
Arrow-Head,	Rabbit Skin,	Oak Sheepy,
Was-E-can,	White Face,	Cut Nose,
Pretty Shield,	Red Feather,	The Runner,
Pretty Bear,	Charlie Rider,	Eagle Man.
Big Darkness,		

The above named Indians had flour of their own raising for the past ten months. I may also state that eight of these Indians have supplied their own beef for three months, and in a short time I expect these Indians will be able to supply their own beef as well as flour, but their little herds of cattle are yet too small to give a full supply of beef.

These 22 Indian families did not require any assistance in the way of rations for the past year, except a little bacon during seeding time, and while at hay and harvest.

This is encouraging, as I expect others to come up to this standard of industry in a year or two.

I may say that it takes very close but kind supervision to lead Indians to be successful as farmers.

The crops generally raised by these Indians are as follows: potatoes, turnips, wheat, oats, barley and pease, corn and lettuce, also onions and carrots.

They also raise cattle for milk and butter, and some for beef. Other stock raised are sheep, pigs and poultry and native horses. It will be seen that these Indians are making fair progress toward mixed farming and are becoming more industrious.

They cut and hauled dry wood to Wolesley mill to pay for grinding their wheat. Paying for gristing in this way is a great benefit to the Indians, as it gives them the full benefit of their wheat crop, in flour, bran and shorts: the bran and shorts are fed to pigs, calves and poultry.

The general advancement made by these Indians during the past few years in all the different branches of farming, is most encouraging.

They were fairly well off last winter for food and were comfortably housed, with a plentiful supply of blankets and other clothing.

They also had cooking stoves, coal oil lamps, dishes, etc., all these things being purchased by money made by sale of dry wood, wheat, hay and tanning hides for white people.

Some of the Indian women card and spin wool, knit socks, mits and gloves, and sell them at the small stores, and purchase tea, tobacco and clothing for their families.

I encouraged my Indians to make an extra effort this summer and started them breaking up new land. They have broken up to date seventy-five acres, which is a good showing, and all are now ploughing their summer-fallow. Five new houses and four new stables were also built during the past month.

They are kept busy all the time on their reserve, as Indians who farm must do their work at the proper time to be successful in raising a good crop.

I give here a short calendar showing what work an Indian has to do on his farm to become a good farmer. As soon as his wheat is all sown and fenced, he then has to start ploughing his garden, then plant potatoes, onions, carrots, etc. He then must repair his fence; and sowing turnip seed, planting corn come next in order.

Then all industrious Indians who wish to be good farmers have to start breaking up new land and continue at this work until about the 20th of June. And then start summer-fallowing, which work must be finished about the 26th of July, to enable them to make hay. This work generally takes about a month, and by that time his grain harvest is on him, and by the time his grain is stacked, his root house has to be put in repair to receive his potatoes and other vegetables, which are now fit to take up.

I give this detailed account of Indian work for the information of the department, and to show that all Indians are kept busy, and what they must do to be successful farmers.

They are willing to do all this work, if their crops happen to look well.

These Indians kept their gardens clean of weeds last summer, and have done the same this year up to date. They have also thinned out all their root crops to the proper distance, and during very dry weather watered their gardens.

I may state here that these Indians were very successful in exhibiting both at Regina and at Indian Head last fall. They showed grain, vegetables and domestic work. Also a large collection of manufactured articles, such as ox collars, fork and axe handles, baskets, knitting and sewing; also hides tanned by Indian women, for which they took prizes at both exhibitions. I may add that two of my Indians took the first prize for both white and red Fife wheat at Regina last fall, shown in open competition with white people. I think this will prove without any doubt the advancement these Indians are making in agricultural pursuits. They are each year evincing more interest in farming.

The Indian women of this agency are becoming more industrious than they formerly were, many of them taking great pride in having their houses and children neat and clean. Most of them have learned to cook, some are able to make fairly good bread, a few make good butter, and others are learning this industry.

A number of these Indian women have also learned to spin yarn; most of them are good tanners, and a large number of them are good knitters and fair sewers.

The number of cattle in the hands of these Indians under government control is as follows:—

Oxen	54
Cows	23
Steers	23
Heifers	16
Bull calves	12
Heifers	6
Sheep	64
Private horses	56
Poultry, private property of Indians, about	100

These cattle were all well wintered and are now in good condition. The calves are well fed and cows milked regularly. All are properly looked after, and the increase has been satisfactory during the past year.

The health of these Indians has been very good during the past year, there being but very few cases of scrofula or consumption amongst them.

I may say that every effort has been made to prevent disease, by such means as burning up all refuse matter around their houses and whitewashing same with fresh lime; the vaccination of all children and cleaning out of all wells used for domestic purposes by the Indian families.

Nineteen children from this agency are attending Regina and Fort Qu'Appelle Industrial Schools. All are doing well, and their parents seem to be well satisfied with the progress made by their children and their treatment at these schools.

Many of these little children write to me often, thanking me for sending them there. They also thank both their teachers and the department for being kind to them.

The annuity payments took place on the 2nd of November last, and passed off quietly, the band showing an increase of nine since last payment. The Indians are learning the value of money; and they spent their annuity money this year in the purchase of such useful articles as cooking stoves, lumber, clothing, tea and tobacco.

The individual earnings of these Indians for the past year was $788.82; earned by the sale of dry wood, hay, beef, wheat and tanning hides for white settlers; and spent in the purchase of blankets, food and other things such as lumber, harness, &c.

These Indians are gradually taking more kindly to the missionaries sent amongst them and seem to appreciate more each year what the department is doing for them in the way of educating their children.

The chief wishes me to state that he is very thankful to the department for the blankets and other clothing sent to his very old people each winter.

These Indians are happy and seem contented and their behaviour during the past year has been very good, there being no complaints made against them by their white neighbours.

I have the honour to be, sir,
Your obedient servant,

W. S. GRANT,
Indian Agent.

Department of Indian Affairs.

TOUCHWOOD HILLS AGENCY, ASSA.,
KUTAWA, 29th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended the 30th June last, together with a tabular statement and inventory of government property under my charge at that date.

I took charge of this agency on the 22nd of December last, being transferred from the File Hills Agency.

Owing to the extremely dry season during last summer and fall, the grain and root crops here were a total failure. This district also suffered severely from prairie and bush fires during the months of July and August; burning over miles of country and destroying hay lands and timber. Nearly all the hay sloughs on Muscowequan's and George Gordon's Reserves were more or less destroyed.

We started seeding on the 5th and finished on the 27th April, but the season was most unfavourable for seeding, being dry with very high winds, which blew the greater part of the seed out of the ground, and the crows and blackbirds were very numerous and picked up a great deal of the seed. There was no growth of any account until the 1st June, as the ground was very dry in the fall when the winter set in. When the snow disappeared in the spring the ground still remained in a very dry state—in fact, it had no moisture at all—and we did not get any rain until the 1st June, since when we have had abundance, and, although our grain crops will be more or less a failure, our root and hay crops will be good.

Owing to the total failure of both grain and root crops here last season, the department supplied this agency with two hundred bushels of seed wheat, one hundred and fifty bushels of best seed oats, and four hundred and two bushels of seed potatoes.

Muscowequan's Band, No. 85.

When I took charge here I found that this band was short of hay, and made arrangements with two Indians of Day Star's Band, who had plenty of hay, to winter them, the Indians who owned the cattle paying for their keep. The balance of the stock were wintered off the reserve, about fifteen miles north-east of their buildings. As the fire swept over nearly all their reserve and burnt a large quantity of hay they had cut, besides destroying the remainder of their hay lands, they had to go to this place and get their hay. As it was too far to haul home, they built stables and houses on the hay ground and kept their stock there. All the stock wintered well and came out in the spring in good condition.

The majority of the houses on this reserve are of a very poor class, but they are going to build better ones this season, for which they got out timber last winter.

Owing to the lakes and sloughs drying up and the scarcity of water, I have had these Indians break up seven new fields about two miles east of their present location, where there are very good lakes and splendid farming land—in fact, the best on the reserve, and where I propose they shall put up their new buildings.

This band has planted this year:

	Acres.
Wheat	4
Oats	34
Barley	5
Potatoes	8
Turnips	4
Carrots	2
Onions and gardens	3

The fields are generally looking very well.

On the 30th June this band had twelve oxen, two bulls, forty cows, twenty-four steers, thirteen heifers, sixteen bull calves, eight heifer calves, besides eight private head of cattle and forty-two horses.

Several families make butter.

The general health of this band has been good during the year. There have been three births and five deaths.

The attendance at the Roman Catholic boarding school on this reserve has been very regular during the past six months; the number on school roll is twenty boarders and five day scholars. The pupils are making very good progress under the management of Mr. F. H. Dennehy.

There are seventy-six Roman Catholics and sixty-six pagans on this reserve.

No. 86.—*George Gordon's Band.*

The fires last summer swept over this reserve and destroyed over three hundred tons of hay and all their hay lands. The Indians then cut hay off the reserve wherever they could find it; some had to go thirty miles, some fifteen and some ten, but they managed to secure altogether eight hundred tons of good hay, which was abundance for all their stock, which were well wintered and in good condition when turned out in the spring. The Indians built houses and stables near to where they had put up their hay to winter their stock.

The majority of this band milk their cows and make butter for their own use, and many of the women are good housekeepers, keeping their houses clean and tidy. A number of them also make good bread.

The houses on this reserve are all of a good class, several being exceptionally good. One man, Josiah Pratt, has a very comfortable house, which is lathed and plastered and the sitting room papered; there are three rooms down stairs, a kitchen, bed room, sitting and dining room, and one large bed room up stairs; his stables and outbuildings are large and roomy and well built; everything about this man denotes thrift and industry. A large number of this band are self-supporting.

This band has in crop this year:—

	Acres.
Wheat	59
Oats	17
Potatoes	8
Turnips, Carrots, Onions (gardens)	3

The majority of the green crops are poor, the balance will be about a third crop; but the root crops are exceptionally good, and taken as a whole are the best I ever saw, and they are kept in good order. The hay crop will also be good.

This band has thirty-three oxen, two bulls, ninety-two cows, fifty-five steers, twenty-five heifers, twenty-eight bull calves, eighteen heifer calves and one horse, under government control; also seventy-two horses and twenty-seven head of cattle, their own private property.

The general health of this band has been fairly good during the year; one birth and three deaths recorded.

There are one hundred and twenty-five belonging to the Church of England, eighteen Roman Catholics and seventeen pagans on this reserve.

The attendance at the Church of England boarding school has been very good, and the pupils are making very satisfactory progress under the able tuition of the Rev. Chas. F. Lallemand, teacher, and Rev. Owen Owens, principal. There are twenty-one on roll as boarders, and five as day scholars. The department has built a large substantial and commodious stone building for this school, in which fifty pupils can be accommodated; the building is forty-two feet wide by forty-eight feet long, and height of wall from bottom of basement is twenty-eight feet. The lime

used in this building was burnt on the reserve by the Indians; also all the stone, sand, lumber, &c., was hauled by them.

Day Star's Band, No. 87.

This band put up five hundred and eight tons of hay last summer, they had plenty for their cattle, besides selling some, their stock was well looked after during the winter and was in splendid condition this spring.

The houses and stables on this reserve are very good, all the houses have thatched roofs, and are well built. They are kept clean and tidy in winter, but as soon as spring comes all the Indians go into tents. Several women in this band make butter and bread.

There was no grain sown on this reserve this year, as no land had been prepared during the past season, the grain crop having always proved a failure. They have planted thirteen acres of potatoes, five of turnips, and three of gardens, all of which are looking very well.

This band has eighteen oxen, two bulls, sixty-six cows, fifty steers, fifteen heifers, twenty-four bull calves and twenty-three heifer calves under government control, also twelve ponies, private property.

The day school on this reserve has eight on the school roll, the attendance has been very regular, and the children are making very satisfactory progress. This school is under the auspices of the Church of England. Mr. Mark Williams, teacher.

In this band there are four Roman Catholics, and seventy-eight claimed by the Church of England.

The general health has been fairly good. There have been three births and six deaths during the year.

Poor Man's Band No. 88.

This band put up four hundred and seventy tons of hay last season. They had abundance for all their stock, besides having some for sale. All the stock was well wintered; most of the animals were fat when turned out this spring.

The houses and stables on this reserve are very good; the majority have thatched roofs. One man has a shingled roof and a bed room up stairs. The houses are kept clean and tidy.

This band also goes into tents in the spring; a few make butter and bread.

They have in crop this year thirty-six acres of wheat, thirteen of oats, twelve of potatoes and three of gardens. The grain crops are very poor, but the root crops are looking very well, and are well cared for.

This band has 16 oxen, one bull, 38 cows, 40 steers, 5 heifers, 11 bull calves and 11 heifer calves under department control; also 39 ponies, private property.

There are nine Roman Catholics, and 88 are claimed by the Church of England on this reserve.

The general health of this band has been good during the year; there have been six births and no deaths.

Fishing and Nut Lake Band, Nos. 89 *and* 90.

This band lives principally by hunting and fishing, and they have sold over 6,000 dollars' worth of fur during the year. They get very little assistance from the government.

They have 10 head of cattle at Fishing Lake.

There are eight Roman Catholics and 355 pagans in this band.

The Indians of this agency started to hold a sun dance last month, but I had the dancemaker arrested for breaking the peace, and had the dance stopped. This is, I think, the first sun dance that has ever been stopped after it had once been started, and I do not think that they will ever attempt to hold another in this agency.

During the short time I have been in charge of this agency, I have had the hearty co-operation of the farmers, whom I have found to be capable and practical men.

Mr. H. A. Carruthers, agency clerk, is a most efficient and trustworthy officer; he performs his duties to my entire satisfaction.

I have the honour to be, sir,
Your obedient servant,

JNO. P. WRIGHT,
Indian Agent.

SAVANNE AGENCY, TREATY NO. 3,
FORT WILLIAM, 14th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June, 1895.

Lac des Mille Lacs.

On the evening of 5th July we arrived at Poplar Point, where the payments of annuities are made to this band.

The gardens here, with two exceptions, are on islands, owing to the inferior soil on the reserve. Their root crops are abundant; one man last year raised pumpkins weighing one hundred and thirty pounds. The cattle are in good condition. The councillors elected last year have given good satisfaction, and the reserve is much better looked after than formerly.

The walls of a school house have been erected, which they are anxious to complete as soon as possible. There is a saw-mill on Lac des Mille Lacs, at which a number of the Indians are employed.

Sturgeon Lake.

This band was paid at Pine Portage on 9th July. They have asked for a new reserve, the present one they allege to be unhealthy. When this is granted, they have promised to clear and cultivate the land and build houses. They make a comfortable living by hunting and fishing.

Wabigoon.

A general improvement was noticeable all over this reserve in the manner in which the Indians are attending to their gardens. With one or two exceptions, the gardens are all on the reserve, close to their houses, and the root crops are very well advanced.

The houses here are well built and a number of new ones are in course of erection.

The school is well conducted, thirty-two children present when inspected. Fair progress has been made in the general work of the school and a number of the older girls have been taught to knit, sew and bake bread, by Mrs. Johns, the teacher's wife, with satisfactory results.

Frenchman's Head.

The gardens on this reserve are properly looked after and a plentiful supply of garden stuff and root crops should be harvested. The cattle are in good condition; the stable is very much out of repair, but they have promised to build a new one at once.

There were thirty-eight children on the school roll, twenty-one of whom were present when the school was examined. The older pupils have a fair knowledge of reading, writing and arithmetic. The school house and premises were clean and in good repair.

Lac Seul.

On going to this reserve we made a detour from the usual route so as to see the hay and wild rice crop on Canoe River. From present appearances a good harvest should be gathered. A number of these Indians have their gardens on islands in Lac Seul. Their crops are very good. Corn grows to perfection on this reserve, and all root crops are a success. The cattle are well cared for and several of the Indians have purchased animals for their own private use. The Indians of this band are a thrifty people and have made good progress in all directions. A number of families with Councillor Ewehkewence are building houses on the west end of reserve, at White Fish River, which will be quite a settlement in a short time.

There were forty-eight pupils at school when inspection was made, thirty of them regular pupils, and the older children are making good progress in their studies. The teacher, Mr. Bannatyne, has taken great pains with the children, and a very creditable showing in all classes was the result.

Wabuskang.

Annuities were paid this band on the 26th July. The gardens are well advanced and every year the Indians plant more potatoes.

There were fifteen children in attendance when the school was inspected, who by the manner in which they went through their exercises showed they had been efficiently taught. The repairs on the school house are being proceeded with. When these are completed, the building will be very comfortable.

Grassy Narrows.

This reserve was reached on the 28th July, and the following day the annuity payments were made.

There is no teacher at this place, and the school has been closed for some time.

The Indians have only one cow here, but I have not seen an animal in finer condition in the district.

The gardens, consisting of turnips, carrots, onions and potatoes, are well cultivated.

Eagle Lake.

This band was paid on the 2nd August and the usual distribution of supplies made. All the gardens here are fenced in, and a general air of tidiness and prosperity prevails. They are a healthy, industrious band, looking well after their own interests.

The cattle are well cared for, and a good stable provided for them.

They have erected a substantial log frame for a school house, and are desirous of completing it as soon as possible.

General Remarks.

The instructions of the department in regard to sanitation, &c., are adhered to by all the bands in this agency.

The Indians enjoy fairly good health, and are self-supporting. There were thirty-four births and nine deaths in the various bands.

Fish has been scarce in all the lakes, but the crop of berries seems to be unlimited.

The sum of $12,772 was received for furs by the various bands, and they killed seven hundred and twenty-five caribou and two hundred and fifty-six moose.

I have the honour to be, sir,
Your obedient servant,
JOHN McINTYRE,
Indian Agent.

TREATY No. 1—CLANDEBOYE AGENCY,
CLANDEBOYE, 12th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June, 1895.

St. Peter's.

The crops this year are immense, nothing could be finer. Wheat and oats stand over five feet high in many places, and barley nearly as tall; the hay crop is also good and a large amount will be put up. A number of the people are now busy at their harvest.

During the year this band sold fourteen hundred dollars worth of hay; they sold nearly fifteen hundred cords of wood, for which they received seventeen hundred and fifty dollars in cash and goods, and four hundred boxes of whitefish (each box weighed about one hundred and thirty-five pounds). With this help such a thing as destitution was unknown on this reserve during the year.

To show that the people are advancing as agriculturists, I may cite that one of the band, Mrs. Charles Sinclair, sold, from four cows, seventy-four dollars worth of butter, besides raising four calves; and many of the women have done as well.

Broken Head.

This band show a marked improvement in their gardens; all are well fenced, well hoed, and free from weeds.

Their cattle and horses look well, although they lost nearly all their calves, I believe from want of salt; the Indians hardly ever use it, so therefore will not buy it for their cattle.

A change of teachers at the school has doubled the average attendance. There are now twenty-three pupils on the roll, with an average attendance of over twelve; this is good, as there are only twenty-three children who live on the reserve of school age, and some of them live at a distance from the school house, so that is impossible for them to attend every day.

I believe a great deal of the credit for the improved condition of the people here is due to the Rev. Mr. Coates, the Episcopalian missionary who now lives on the reserve, he is most indefatigable in his work, and his garden is an example to all.

The fur hunt was above the average for this band; fishing was below the average, particularly fishing under the ice; and only about thirty moose were killed during the winter.

Fort Alexander.

I never saw finer crops of all kinds than on this reserve. They do not grow much grain, but they do grow a large amount of vegetables of all kinds.

The largest field of beans I ever saw in Manitoba is on this reserve, grown by Joseph Kent: he must have nearly two acres; last year he harvested over eleven bushels from less than an acre.

The fur hunters were most successful last winter; they sold over five thousand dollars worth. Duncan Nees-sho-ta sold over four hundred dollars worth of fur from his own gun and traps, this was from his winter hunt.

Fishing during the winter was poor, not over fifteen tons were sold, and prices the lowest on record.

The cattle and horses were well wintered, as there was no scarcity of hay.

A number of the people here are clearing land and sowing timothy and clover, both of which grow luxuriantly on this reserve; this is greatly owing to the example of the Roman Catholic and English missionaries, who are represented by the Rev. Father Magnan and the Rev. Edward Thomas, who are both practical and progressive farmers, as well as good missionaries.

General Remarks.

There are ten schools in my agency, three Roman Catholic and seven Protestant, with two hundred and seventy-five children on the roll, and an average attendance for the year of one hundred and twenty-six. Besides this there are fifty-five children attending the Rupert's Land, sixty-six St. Boniface and twenty-seven the Elk Horn Industrial School, making a total of four hundred and twenty-three children who are attending, out of a possible four hundred and seventy who are of school age; besides this several treaty children attend school at Selkirk, Rat Portage and other places, so that there are not forty children in my agency who do not attend school. The parents of these children are generally pagans, who wander all over the country hunting and fishing and begging for a living.

At the day schools, besides the usual standard course of study, knitting is taught. Thirty-four girls can do plain and fancy work; four boys and eleven girls can do plain work, such as mits or stockings, but the parents rather object to the boys learning, as they consider it beneath their dignity to do such work.

The children who live at St. Peter's and Broken Head can now nearly all speak English, and are quite pleased to answer questions and talk to strangers. A few years ago they would have run away and hidden.

Statute labour was done voluntarily on all the reserves. At St. Peter's this year, as the public highways were in good condition, they did the work on the roads running east and west, which go to their hay fields and farms; they now have nearly thirty miles of roads, with twenty-eight bridges and culverts inside of their reserve. These roads and bridges are as good as any in the country.

At Broken Head they widened out a trail through the bush, by which they save themselves about two miles when they want to drive into the settlement.

At Fort Alexander they have almost completed a road through their reserve half a chain wide, on the south side of the river, which will be most convenient for everybody.

The catch of whitefish has been poor during the last two years. Some people think that it is because the large fishing firms are catching so many in the northern part of the lake; but, as the fish caught north are so different from those caught in the south end, I do not think that this accounts for the scarcity. My experience is that the northern whitefish never migrate south, but keep in the deep cold waters of the northern part of the lake.

Sturgeon, pike, suckers and maries are very plentiful, and as they are all spawn eating fish, possibly they may have something to do with the shortage in whitefish.

Mr. La Touche Tupper, Inspector of Fisheries, placed two million young whitefish from his hatchery in Muckle's Creek at the agency, and it is most interesting to

see the young fish now. They are swarming about in hundreds, and are about two inches long.

There has been, and is, a good deal of sickness amongst the people, whooping cough, mumps, influenza and consumption, from which a number of children and adults have died. This necessitated the distribution of a large amount of medicine, and it has been an exceptional day when Indians are not at the agency for medicine.

Drinking of intoxicants amongst the Indians on the reserves is a thing of the past, and I have only seen one drunken Indian during the year.

I have the honour to be, sir,
Your obedient servant,

A. M. MUCKLE,
Indian Agent.

RUPERT'S LAND INDUSTRIAL SCHOOL,
MIDDLECHURCH P. O., MAN., 30th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended the 30th of June, 1895, together with the inventory and valuation of all government property under my charge.

Steady progress has been made and satisfactory results can be recorded.

The attendance has been kept up to the limit of accommodation. The children are contented and attentive, and are making efforts to succeed. Since my last report the blacksmith and printer instructors have been dismissed and trained pupils placed in charge of these departments. They are getting used to their business and are gaining more self-reliance.

Five boys have received a monthly remuneration, of small amount, in recognition of their services, and this adds greatly to their encouragement and gives an incentive to energetic work. I am a great advocate of this policy of training pupils to be instructors of their own race.

Those who have been so placed here prove most decisively the beneficial results of this system of training and dispel the doubts thrown upon it by being themselves living witnesses to those who will take the trouble to enquire into the matter.

Since the opening of the school, out of forty-seven, the total number discharged, seven pupils are married to Indians, and have houses of their own, and are doing well; seven are working for their own living and have good reports; one unknown; one gone into the Roman Catholic school; and one discharged as incorrigible; nineteen have died, and ten discharged by doctor's certificate as being unfit for pupils owing to development of scrofula, consumption, or other diseases.

Since the department has had charge of this institution more care has been taken in the selection of pupils of fit stamina, none being admitted without a rigid examination by the medical officer. Quite a number have been refused admittance. Those in the school who have suffered from scrofula in its different forms, have been very successfully treated by Dr. Orton, and the idea of establishing a hospital for the special treatment of this disease and consumption, would alleviate much distressing pain and suffering, and be a means of civilization to many of the careless and neglected ones.

Good progress has been made in the class room. The half time system is still continued. Kindergarten work introduced in standard one has been most enthusiastically entered into by the juniors, and excellent specimens of their work prepared for exhibition.

The farm is being brought into much better condition and part is being fallowed and manured; that which is in crop promises an excellent yield both of grain and vegetables.

The carpenter is the only trade instructor. Arrangements are being made for all the larger boys to have some instruction in this department, which is the most useful. His time has been chiefly occupied in repairs and improvements to buildings.

In the blacksmith shop Joe Kent and Frank Spence (pupils) have charge, and they are doing very satisfactory work; they do some outside work, but both this and the printing shop are handicapped in the way of earning much by the opposition of local tradesmen, who complain that it interferes with their business. Care has been exercised that this should not be the case, but it is to be regretted that this means of reducing the expenses of these trades is thus cut of. Arthur Cochrane and Maurice Sanderson have the management of the printing, and publish the *Aurora*, the school magazine, monthly, and have earned sufficient to show a profit in this branch.

In the girls' department great progress is noticeable. Jessie Bird, who had charge of the sewing room, has returned to Battleford, and Mary Cochrane placed in her stead. She has made great strides in dressmaking and developed good taste.

Nancy Stevenson learnt to use the knitting machine. She and a class of girls have made the necessary hose and mitts. This branch shows a very good record.

The supplies are now furnished by contract with the department and are satisfactory, and with the increased number of pupils the expenses much reduced.

Visits have been paid by the chiefs of St. Peters, Fort Alexander and Fairford, and to them I am indebted for their assistance and co-operation.

Much aid and interest has been given by Mr. Inspector McColl and the agents of the districts.

I have the honour to be, sir,
Your obedient servant,
JOHN B. ASHBY,
Principal.

BLOOD AGENCY, MACLEOD, ALTA., 8th August, 1890.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on this agency, together with tabular statement and inventory of government property under my charge for the year ended 30th June last.

The season of 1894 was a dry one throughout and the crops on the reserve were almost a complete failure. Few Indians were able to get sufficient seed for next year's crop. This season's work began on the 1st April, the Indians doing all their ploughing with their own horses, the seed supplied by the department enabling them to put in a good breadth of crop. The weather during April and May was very dry with strong winds during the day and frost at night, which made vegetation very backward. Rain in sufficient quantity was got in June and now the crops give promise of an abundant harvest.

During the season 52 acres of new land have been broken, and with two exceptions all the Indians used their own horses for this work, which was done in a very creditable manner.

The hay crop of 1894 was a fair one and a good supply was put up. About 60 tons were stacked at the Northwest Mounted Police detachments in the neighbourhood of the reserve, and 41 tons delivered to the Walrond Ranche Company for their beef cattle. The Indians also cut some 500 tons as well as what was required for their own use and what was required for the agency, farmers and hospital. There were 15 mowers at work during the season, of which 10 were private property. The Indians did good work at the haying, and those with breeding cattle had enough for winter's use and some few loads to sell as well. A neat stack could be seen at

nearly every working Indian's stable, which gave the places an air of comfort and plenty. A prairie fire got out on the reserve and destroyed a large amount of feed, besides consuming over 100 tons of hay in stack and on th ground. The Indians tried to get it out, but were not successful until about half of the reserve had been burned over.

The experience had last season with our irrigating wheels at the agency garden proves what an incalculable benefit irrigation would be. Mr. A. W. Ponton, D.L.S., made some preliminary surveys last fall for the purpose of finding out whether it would be possible to get water on the bench land or not. I am pleased to learn he reports the work feasible, and now that the Indians are taking cattle in some quantity it will be absolutely necessary to have a much larger amount of hay, which can only be secured on the reserve by irrigation. The amount of land available for crop or hay irrigation is only limited by the quantity of water to be had.

The first fifty head of heifers issued to the Indians last summer have done well, and the Indians took great care of them all winter. The cattle were never stabled, but kept in good sheds, and corrals carefully made and well sheltered in the brush, the increase for the first year being thirty head. The other Indians have shown great anxiety to get cattle, and a large number have been applied for. During the present year I have traded over one hundred head of cattle to different Indians for ponies, and still the supply is not equal to the demand. This owning of cattle I consider the first great step these Indians have yet taken to make themselves self supporting, their reserve being one of the best grazing parts of Southern Alberta and capable of feeding a great many thousands of cattle.

The new houses built during the year still continue to improve, being larger and higher in the walls, and now that the saw-mill is making good lumber, I trust soon to have a lumber floor in nearly every house. The majority of the houses are whitewashed. The village system, which was so apparent a few years ago, has now almost disappeared, and there are really not more than three villages on the reserve. The Indians have spread out up and down the river side for a distance of about fifty-three miles, while others have taken up places along the different creeks.

A very noticeable change has taken place in a number of Indians, who now have horse stables, cattle sheds, &c., erected at their places, some of which would do no discredit to a white settler.

The work performed by the Indians during the past year has been much greater than in any previous season. Besides doing all the freighting of supplies, and coal mining, and hauling for the agency, they have hauled all the supplies that were required for the boarding school, as well as the coal for that institution. Some fifty tons of coal was also mined and hauled to Macleod and the settlers in that district. Immediately after spring work was over, a large party of working Indians went to the mountains to get out timber. The weather was most trying during the whole time the Indians were at this work, being cold, with heavy showers of snow and rain. Notwithstanding this, the Indians worked well and succeeded in getting out and delivered on the reserve some two thousand five hundred sawlogs and about ten thousand pieces of other timber. The water in the river was very low this summer, which made the work much heavier. The scene at the saw-mill was an animated one while the Indians were taking their logs out. The river and the village had quite a business-like appearance for some considerable time, with so many teams working getting the logs forward to the mill.

The amount of money earned by individual Indians from all sources during the year was over seven thousand dollars, which is the largest sum yet earned by them, and this sum has been divided among a greater number of working Indians than at any previous time. As a rule the money has been well invested by the Indians purchasing larger horses, harness, mowers, rakes, waggons, and other implements and tools.

The saw-mill has now been got into proper shape and is running well and doing good work. A large amount of labour has been done at the mill and pond during the year, as many as eighty men being at work at one time. The Indians have arranged to leave ten per cent of their logs to be kept back for the purpose of

getting sufficient lumber to build a good house over the mill and to make any alterations or repairs which may be found necessary from time to time.

Annuity payments took place in November and passed off in the usual quiet and orderly manner, the Indians leaving for Macleod and Lethbridge immediately thereafter to make their purchases. I visited Macleod the next day and found them spending their money in a judicious manner. A goodly number of cooking and heating stoves were bought and also furniture and the usual supply of warm clothing for themselves and families. The large majority of the Indians returned to the reserve within a few days.

A determined effort was put forth to stop polygamy among these Indians; and I am glad to say that, although it met with opposition at first, the Indians now look upon it as a step in the right direction, and there will be little or no difficulty experienced in the future in making the tribe monogamous.

There have been five day schools in operation during part of the year, but the attendance has not been good. The Indians take little interest in them and prefer sending their children either to industrial or boarding schools. There are seventy-two children in industrial and sixty-one in boarding schools near the reserve.

The general health of the Indians has been fairly good during the year, although influenza caused a number of deaths especially among the young and very old people. The births numbered seventy-one (71) during the year, while the deaths amounted to eighty-eight during the same period—the latter including the suicide of a woman by hanging and the accidental death of a girl by drowning.

That the Indians have made good progress towards civilization there can be no doubt, and this has been attained by the farmers concentrating their efforts strongly upon those who showed any desire to better their own position. The others, seeing their success, soon followed, and thus we now have a large body of good working men. If we take a retrospective view, this is more readily seen. In 1886 there were thirty fields in operation, which were ploughed and worked almost entirely by the white labourers on the reserve; now there are eighty-four fields, the work in which is all done by the Indians themselves and with their own teams. Then there was one mower, now we have fifteen. In the matter of dress, even, the Indians show a marked advance and, except the very old men, they nearly all wear white men's clothing. Among the women the change is not so noticeable; still, even here one can see considerable difference. The large majority now make bread instead of bannocks, while a few milk cows and make fair butter. Their houses too are cleaner and better kept. In former years the work of getting firewood was exclusively done by the women from day to day, and now the men haul the larger portion of it, and good sized piles of firewood may be seen at almost every house.

The employees have given satisfaction and willingly assisted me at all times in the work of the agency.

I have the honour to be, sir,
Your obedient servant,

JAMES WILSON,
Indian Agent.

COUCHEECHING AGENCY,
August 9th, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report and tabular statement for the year ended 30th June, 1895. Having visited all the reserves on Rainy River and some on Rainy Lake every month since last making my annual report, I have had a good opportunity of watching the progress or otherwise of the Indians under my charge, and, though a few may be at a standstill, the majority are

reaching out for themselves and earning comfortable livelihoods. The best proof in support of this lies in the fact that, though the fishing and hunting brings them in less every year, the amount of destitute supplies furnished by the government does not increase, and yet from close observation I am satisfied my Indians live more comfortably and dress better than they did five years ago.

The Indians on the Lake and especially those on the Seine River have profited largely by the gold discoveries in that region. Chief Paypahmachas, his two sons and several others, have earned good wages in showing locations to prospectors and giving information generally. The chief's family kept a stopping-place on the reserve all last winter and were highly spoken of by all who patronized them, as being most obliging and keeping a comfortable house. The people in this district were all sorry last winter when the chief lost his eldest son, and many, I am told, called on the chief to express their sympathy with him, a fact which he very much appreciated.

The acreage under crop this year shows a slight increase over that of last year and though the spring was cold and wet, making everything backward, it is perfectly wonderful how the heat of the last three weeks has forced everything along, making it now quite possible to have a good harvest.

The water has been high this season, but not equal to last year, and as a consequence the hay crop will be heavier. The Indians will also be able to get some rice.

During the year there have been five day schools open, the additional one being on the Stangecoming Reserve, which was opened under the auspices of the Roman Catholic Church. The other four have the same teachers over them as last year and are making fair progress. The attendance remains about the same, but should be better. The new schools on the Long Sault and Little Forks Reserves are now finished and present a very handsome appearance, the ground around them having been fenced in by the Indians and the brush cleared away.

Quite a few Indians were absent from the payments this year, fishing, &c., making a difference of thirty-seven in the number paid this year as compared with last year, though the difference between births and deaths was only four, the latter being in the majority.

The health of the Indians has been attended to by Dr. Birdsall, of Fort Frances, and outside of some fatal cases of consumption and influenza, there has been nothing seriously the matter with them.

Perhaps one of the most noticeable improvements on the reserve is the better class of dwelling houses that our Indians are now making; they are being made much larger, better finished and altogether more after the style of white settlers' houses, showing conclusively that, if the Indian cares to take the trouble, he can make himself very comfortable indeed. It will also help from a sanitary point of view.

In conclusion I would say that during the year the Indians under my charge have been prosperous, law-abiding and obedient.

I have the honour to be, sir,
Your obedient servant,

F. C. CORNISH,
Indian Agent.

Department of Indian Affairs.

SARCEE INDIAN AGENCY,
CALGARY, ALTA., 25th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, with tabular statement and inventory of government property, for the year ended 30th June, 1895.

The crop of 1894 was almost a total failure owing to heat and drought; the hay, though comparatively poor, yielded one hundred and eighty tons; wheat yielded ninety-five bushels; oats, one hundred and ten bushels; turnips, three hundred and twenty-five bushels; carrots, thirty-nine bushels; and potatoes, only fifty-seven bushels; barley was a total failure. Of the hay cut, sixty tons were for the agency and one hundred and twenty for the Indians. This is much more than they have ever cut in one season. The greater part of the Indian hay was sold at remunerative prices in Calgary, and the rest was fed to their cattle and horses. For the first time in their existence, the Sarcees kept enough hay to feed their cattle and horses until the grass was good.

The money received from the sale of hay was spent judiciously, and helped to make them more comfortable than they have been for years

A considerable amount of firewood was cut, and sold in Calgary, though the long haul, twenty-two miles, is discouraging; the wood, and most of the hay, was hauled by their own horses. The winter was severe, with a greater snowfall than usual.

The cattle wintered well, though having been worked hard until late in the fall, they did not look as well this spring as usual, but they gained flesh while putting in the crop, and are now in good order.

In 1894, thirty and one-half acres of new land were broken on the bench, and sixty-five acres were summer-fallowed; but the greater part of the summer-fallow was old Indian fields in the creek bottom, abandoned several years ago as they were foul with weeds and subject to summer frosts; I am now attempting to seed them to grass. The Indian fields are now all on the bench. The spring of 1895 was late for agricultural purposes, and very unfavourable for farming operations, the wind blew a gale nearly every day, besides being cold and without rain.

Seventy-eight and one-quarter acres were seeded for the Indians; wheat, twenty-one and a-half acres; oats, nineteen acres; barley, thirty-five acres; potatoes, two and one-quarter acres; turnips and carrots, one-quarter of an acre each. Eighty-seven acres were seed for the agency, sixty-two acres of this is the old bottom lands that I wish to get into grass; the agency farm proper is only twenty-five acres.

Warmer weather set in in the latter part of May, accompanied by copious rains; since, the growth has been very rapid. The crops now look as well as could be wished.

The swamp hay is poor, but the upland will yield a beautiful crop.

The potatoes promise a good yield, but the turnips and carrots have been destroyed by the cut-worm; all the fields are clean of weeds.

Five houses have been built, five are in course of erection, logs for three more are on the ground, and timber for four more has been made; timber for stables and sheds has been cut and hauled.

The assistance in building given the Sarcees by the department, in providing the roofing material and windows, has pleased and encouraged them; the houses now being built are substantial and comfortable, overcrowding will cease.

All the freighting, haymaking, building, and other work of the agency, is done by the Indians without extra cost to the department.

The earnings of the past year are $1,725.00, an increase of $500.00 over the previous year; the Sarcees are willing to work when they can obtain cash in payment, and seek employment from the surrounding settlers.

The agency stock is increasing, very few losses occur, the young cattle are stabled and made gentle, the steers are broken to work, and the heifers to milk, and are then distributed to the Indians as fast as they can be induced to accept them.

During the past year cows and oxen have been issued on the loan system to five families, including the chief's: it has been most difficult to induce them to accept cattle on any condition, but, now that the compact is broken, I believe that all who are capable of taking care of cattle will apply for them.

The Indian houses and agency outbuildings were whitewashed and made as comfortable as the circumstances would admit, but overcrowding in the Indian houses was unavoidable.

The agency buildings are in good repair.

The health of the Indians has been good, though there is a decrease of three. During the past seven years there has been an excess of deaths over births of thirty-three.

I feel justified in reporting an improved condition of the Sarcees, though progress is slow; no great success has been achieved in any one direction, but many things, though of little importance in themselves, show general improvement

To understand the difficulties to be contended with in dealing with the Sarcees, it must be remembered that they are more tenacious of their customs and superstitions than other Indians; their language is an unknown tongue to any but themselves, and very few of them can understand any language but their own.

Until recently they believed themselves doomed to extinction in the near future, and did not appear to wish to exert themselves to avoid what they considered to be their inevitable fate, but the small measure of success that has attended their labours latterly, has made them more hopeful.

Gambling and the use of intoxicants have been in a great measure suppressed.

Missionary work that has for many years been apparently without result, has recently met with more success; four Sarcees, two adults and two minors, have been baptized by the Rev. Mr. Stocken; and one Sarcee and two Crees have been baptized into the Roman Catholic Church in Calgary.

The agency staff remains the same. I am glad to say, I receive their hearty co-operation at all times.

I have the honour to be, sir,
Your obedient servant,

SAMUEL B. LUCAS,
Indian Agent.

INDIAN AGENT'S OFFICE, TREATY No. 6,
DUCK LAKE, SASK., 15th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my eighth annual report, together with tabular statement and inventory of government property under my charge, for the year ended 30th June, 1895.

There are six bands in this agency, and the total population according to the census last taken amounted to six hundred and twenty-seven souls, showing a decrease of twenty on the preceding census, which decrease is accounted for by the deaths being ten in excess of the births and the number of souls who have left the reserves through transfers and intermarrying being ten in excess of those who have joined.

Other two bands living at Montreal Lake and Lac le Ronge, numbering five hundred and twenty-five souls, are also dealt with by this agency.

No. 95.—One Arrow's Reserve.

The Indians of this reserve, I am pleased to say, are beginning to work with more energy, and, although their agricultural labours were not crowned with much

success last harvest, still they went to work with good will at their seeding when spring came round again.

Owing to the extremely dry season and unfavourable growing weather, these Indians only harvested the following crop of grain and roots, viz.:—

	Bushels.
Wheat	198
Oats	24
Barley	24
Potatoes	325
Turnips	150

So far as grain is concerned this gave the Indians little more than seed for their next crop, but the result of their root crop in a measure made up for the disappointment due to the failure of the grain.

Mixed farming is followed on all the reserves of this agency, and on this particular reserve three hundred and fifty tons of hay were put up for stock and we had sufficient and to spare.

The chief earnings of the band have been from the proceeds of cattle killed for beef, sale of furs and dressing hides, which to some extent has curtailed the issue of rations. These earnings have been chiefly expended in replacing the cattle killed for beef and in the purchase of implements, provisions, clothing and occassionally lumber to repair their dwellings.

A marked improvement is noticeable in the cleanliness of the houses and stables and in the personal appearance of the Indians. In their houses will be found stoves, as well as open fireplaces, tables, chairs, raised beds and cupboards, the latter in the majority of cases being home manufacture. The women are more industrious and are taking an interest in making butter and bread, and are frequently found sewing and knitting.

The acreage under crop this year is about the same as last. The spring opened early with warm dry weather, but during the end of May and beginning of June it turned cold and the growing crops suffered considerably. Since then there have been some heavy showers and, although the crops are very backward, with favourable weather we hope for a fair harvest. The hay crop is backward, but with rain it will grow quickly.

Okemasis and Beardy's Bands, Nos. 96 and 97.

These reserves adjoin one another, and may be dealt with together.

I am pleased to say that these bands continue to progress satisfactorily, and, although they also were not successful in raising a good crop, still they are not disheartened, and have put in over two hundred and twelve acres of crop this spring.

The following shows the result of last harvest:—wheat, five hundred and sixty-two bushels; oats, one hundred and eighteen bushels; barley, forty-three bushels; potatoes, five hundred and thirty bushels; turnips, eleven hundred and ninety bushels.

The greater portion of the grain was saved for seed, and, owing to the poor yield, due to the very dry season, little was left to turn to account for the Indians' self-support. However, two families provided their own flour for two months. The root crop, being good and well protected in the owners' cellars, was a great benefit to the Indians.

The principal earnings of the band have been from the proceeds of cattle killed for beef, labour, sale of furs and dressing hides. A portion of the money derived from cattle killed has in most cases been devoted to replacing the animals, and the balance expended on food and clothing; in other cases farm implements have been purchased, and sometimes lumber and household utensils.

It is particularly noticed with these Indians that they do not spend their money in such a frivolous manner as they used to, and appear to take more pride in keeping themselves and their houses clean and tidy. The women are more industrious than heretofore, and most of them make butter for their own use, and some of them make bread; they are invariably found busy at something—working in their own fields, or the agency fields, or at their homes dressing hides, sewing or knitting. And here I may mention that in addition to the yarn supplied them by the department they often devote a portion of their earnings to the purchase of other yarn, and seldom do they buy ready-made clothing, generally preferring to purchase the material and make their own clothes.

The stables on these reserves have been better attended to during the past winter than any previous one, being clean and comfortable. The cattle are always well cared for, and, although the hay crop was light, six hundred and forty tons were put up. At threshing the straw was well stacked and fenced, and afterwards fed once or twice a day to the cattle, and when they were turned out to graze in the spring one hundred tons of hay remained unconsumed.

Less trouble is now found in getting these Indians to keep their implements under cover than heretofore.

The outlook for the growing crops is not so favourable as I should like to see it, as in other districts the spring set in early and after the grain was well up continued dry weather retarded its growth. Both hay and grain are now very backward and the crop prospects are poor.

In August last the department established an Indian boarding school near the Duck Lake Mission, under the auspices of the Roman Catholic Church, the Reverend Father Paquette being principal. This school accommodates thirty pupils and is conducted by English nuns and at present there is an English male teacher for the boys. English is the language taught, and rapid progress is being made. The grounds are admirably laid out and a number of substantial buildings have been put up by the reverend principal, partly out of his own private means. The whole place presents a picturesque appearance and every place is kept scrupulously clean and tidy. The reverend principal is very energetic and persevering and is aiming at making his instiution one of the best in the Territories.

John Smith's Reserve, No. 99.

This band shows the most civilization of any belonging to this agency and these Indians have been fortunate enough to harvest a good crop. The following shows the quantities of different grain harvested last fall.

	Bushels.
Wheat	1,316
Oats	1,712
Barley	153
Potatoes	524
Turnips	50

It has been unnecessary to render much assistance in the way of food to this band this year; where it has been given was chiefly in cases of sickness, for work done or where it was found that a little extra encouragement was advisable to help a farming Indian in his own work.

Seeding was commenced this spring with good heart, and being more fortunate as regards weather than the other bands, already referred to, I am pleased to say that the outlook for the coming harvest is good. Two hundred and forty-three acres are under crop, and all looking well.

The prospects of a hay crop are fairly good, and I have no doubt a sufficient quantity will be secured to winter the cattle.

The stock were well attended to last winter. Hay, straw and good water were plentiful. The stables, as a rule, are well built, large, comfortable and well kept, and with few exceptions, are fitted with stanchions.

The majority of the houses are clean and comfortable; most of them compare favourably with the average of white settlers' houses in the district, and the Indians themselves are clean and tidy and dress like white people. The women in general are industrious and keep their children clean and well dressed. Much interest is taken in making bread and butter and in raising poultry. Household duties are well attended to, and such articles as mitts and socks are made by the women and girls.

The earnings of the band are chiefly derived from the sale of produce and furs, and from labour, and as a rule are spent on provisions, clothing and other useful articles; also from cattle killed for beef, which are generally applied to replacing the animals killed, or to the purchase of implements, such as mowers, horse rakes and wagons.

The day school on the reserve is under the auspices of the Church of England, and is progressing well, the attendance is good, the average for the year being ten. The teacher, Miss A. McGregor, takes great interest in her work and is doing her utmost to make the school a success.

James Smith's and Cumberland Reserves.

The Indians of these bands cannot be looked upon as being farmers. With the exception of four or five families, they are very indolent. It is true they have not had the advantage of a local farming instructor until lately, to look after them, but he finds his task a difficult one on account of their lazy habits and roving disposition. The few who are inclined to work are certainly improving, and I trust that, with perseverance, we shall win others to join them. Farming is new to them; still their efforts last year were not altogether fruitless. The following will show the result of this harvest:—

	Bushels.
Wheat	356
Oats	112
Barley	30
Potatoes	500
Turnips	70

The acreage this year is about fifteen in excess of last year, and for beginners the work has been most creditably done. The early growth was retarded by dry weather, but rain followed and it soon recovered and the crop when I last saw it looked well.

Hunting is the main source of the earnings of these bands, and in this pursuit they have been a little more successful than last year. They do not, however, squander the little they do make, the greater portion of it being spent on provisions and clothing.

The houses on these reserves are, as a rule, clean and tidy, and there is a noticeable improvement in the cleanliness and dress of the Indians themselves. A few of the women have taken to raising poultry and making butter for their own use.

Little interest is taken by the majority of the band in their cattle, and as a consequence the work of wintering falls upon the few industrious ones, and an arrangement was made this year that those who went off hunting should pay those remaining on the reserve for looking after their cattle.

Six hundred and thirty tons of hay were put up last fall, which gave an abundant supply, and a balance of ninety tons was on hand this spring when the cattle were turned out to graze. They came through the winter well, and when I last saw them they were in fine condition.

In the majority of cases the stables are well built, large and comfortable and fitted with stanchions.

The number of cattle under government control in the hands of the Indians, throughout all the reserves of this agency, are as follows:—

Oxen	145
Bulls	21
Cows	244
Steers	136
Heifers	110
Bull calves	93
Heifer calves	95

The average natural increase this year was seventy-seven per cent on the number of cows. Of the bulls three are Polled Angus, three Galloways, three Hereford and one Short-horn, all thoroughbred. The remainder are grade Short-horns.

In addition to the foregoing list of cattle the bands have the following which are private property.

Horses and ponies	171
Oxen	5
Cows	33
Steers	20
Heifers	20
Bull calves	15
Heifer calves	12

The natural increase on the number of cows this year was eighty per cent.

The health of the bands on the whole may be considered satisfactory, sanitary precautions being strictly observed. There have been several cases of sickness, but where deaths have occurred, they have invariably been from old age or long standing cases of consumption or scrofula. All cases were attended to by Drs. H. U. Bain, A. B. Stewart or T. C. Spence. A good supply of medicines is always kept at the office and also at the different farms.

Treaty payments were made by Mr. William Sibbald of this agency at Montreal Lake on the 20th of August last and at Lac le Ronge on the 27th; and he arrived back at the agency on the 6th of September.

Treaty payments commenced here on the 24th of September and concluded on the 3rd of November. In all cases the payments passed off satisfactorily to the Indians and the paying agents.

Inspector McGibbon visited this agency in July and August last on his annual inspection; and I may say he appeared to be pleased with the manner in which the affairs of this agency are conducted.

A few repairs have been made to the agency buildings, a new milk house has been built at the clerk's quarters and eaves troughs have been put up on both agent's and clerk's houses. At One Arrow's Reserve the roof on the kitchen of the farm house has has been raised. At Beardy's Reserve a new kitchen has been added to the farm house.

At John Smith's Reserve a good substantial house has been built for the farmer at a cost of about $850; and at James Smith's Reserve, Fort a la Corne, material has been laid down for the erection of a farm house, and the building will be proceeded with at once.

A slight change has been made in the employees of this agency, farmer Wilson having been exchanged for farmer Price of the Battleford Agency.

The clerical work of the agency is performed by Mr. Wm. Sibbald, who, I am pleased to say, gives me entire satisfaction.

I have the honour to be, sir,
Your obedient servant,

R. S. McKENZIE,
Indian Agent.

Department of Indian Affairs.

INDIAN AGENCY, TREATY NO. 6,
ONION LAKE, SASKATCHEWAN, 30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report together with tabular statement and inventory of all government property under my charge for year ended 30th June, 1895.

ONION LAKE RESERVE.

		Band No.
Composed of	See-Kas-Kootch	119
do	Wee-mis-ti-coo-see-ah-wasis	120
do	Quo-nee-pow hayo	121
do	Pees-kee-ah-kee-win	122
do	Kee-hee-win	123

Since my report 30th June, 1894, these Indians have been steadily progressing towards civilization, their mode of living and form of dress is more after the fashion of the whiteman. The people are at all times well dressed and clean and they are always anxious to improve their condition.

During the season of 1894 the Indians put up twelve hundred tons of hay for their own stock, in addition to fifteen hundred tons for the department herd. The hay was short and the crop light.

These bands seeded thirty-three acres of wheat, two hundred and eighty-two acres of barley, fifteen acres of potatoes and ten acres of turnips.

I am sorry to say the crops did not turn out as well as anticipated last summer; this was owing to the dry season. After threshing we realized two hundred and five bushels of wheat and fourteen hundred and fifty-two bushels of barley. Out of the grain threshed one hundred and twenty sacks of barley flour were ground at the mill.

The area under crop this spring has been increased nearly two hundred acres over the previous year. So far the crops are looking favourable, although backward, owing to the cold nights, with heavy frosts, during May and the early part of June.

The fields are large and well fenced.

Last fall fifty-four thousand feet of lumber was sawn at the mill. Four hundred more logs were cut and hauled to the mill during the winter.

Each individual Indian manufactures for his own use hay racks, ox yokes, sleighs, axe and fork handles. On account of the inferior quality of the wood in this section of the country, these articles do not wear well; therefore the Indians are required to make them often.

The Indian women of this reserve are very good butter makers and make a great deal of butter for home consumption. Nearly all of them can knit and sew very well.

The sheep in the hands of the Indians wintered well, and now number one hundred and sixty-two.

A few families keep poultry to a limited extent and take a great deal of interest in them.

The cattle belonging to these bands are all in excellent condition; they wintered well, and the hay supply proved to be sufficient.

The stables all have stanchions for the cattle, are warm and comfortable, and during the season were whitewashed and somewhat improved.

The Indian dwellings, chiefly of logs, are kept in good order. All the houses have open fireplaces. The furniture consists of tables, benches, bedsteads and shelves, all of the Indians' own manufacture. The neat and clean appearance of the premises is a great credit to them.

The sanitary condition of the houses and premises has been well looked after during the spring months.

Vital statistics show thirty births and twenty-one deaths on record during the year, an increase of nine over deaths. Of the persons who died, sixteen were children nearly all under five years, one man of old age, and four cases of consumption. Generally the health of this band has been very good, although there have been a few cases of scrofula and consumption.

Last fall the Indians were allowed to sell a few of their cattle for beef. The money was used in purchasing two mowers, two rakes, a wagon and a set of harness, besides many other necessaries. They now see that it is to their advantage to care well for their stock.

The annuity payments commenced on the 9th November and ended on the 13th November. I am pleased to say that everything passed off very quietly. By six Indians entering treaty and by six births, the population was increased twelve since the payments in 1893.

The fiscal year was commenced by the 1st July being given to the Indians as a day of amusements and athletic sports. In the evening they enjoyed themselves dancing the whiteman's square dances. The day proved to be one of success, every one departed quite pleased and satisfied; they appeared to enjoy this much more than the old pagan form of amusement.

Schools.

Since the 1st July, 1894, the Onion Lake schools have been conducted as boarding schools.

The Roman Catholic boardingsc hool has a day school in connection; it is under the management of the Roman Catholic mission and reverend Sisters of the Assumption. A very large building is being completed for the purpose of a boarding school; therefore we expect to see great improvements in the future.

The pupils have improved in speaking the English language. An examination was held before the school closed for the summer vacation. The classes are well organized, and the pupils took part in dialogues and recitations, which were very much to their credit, they also sang very well.

The Protestant boarding school is conducted under the auspices of the Church of England mission. A number of the older pupils left this school during the year; the remaining children are very young, therefore the progress in English speaking is slow.

Average attendance at both schools has been good.

Hunting Indians.

This spring the hunting Indians of this district held their sun dance at Frog Lake. They sent out invitations to all the Saddle Lake and Onion Lake Indians; but I have much pleasure in stating that neither the Saddle Lake Indians nor these responded to the call, except two or three, who, upon their return appeared very much ashamed of their conduct.

These hunting Indians make a very good living, but are now rather hard up, and a few are anxious to assist in hay making for the government herd at Long Lake.

Chippewayan Band, No. 124.

These Indians, as in the past, have maintained themselves by fishing, hunting and stock raising: in these they have been very successful during the winter.

The fur has been plentiful owing to the large number of foxes.

The catch of fish was not so large this year.

The earnings amounted to over $6,000. The money was expended on food, clothing and other necessaries.

Very little is done in the way of farming by this band, a few acres of barley, potatoes and turnips were sown. The department has been called upon to render but very little assistance to these Indians. Only in a few cases of destitution I helped them with a little food, ammunition and twine for nets.

All the stock is in good condition and wintered well, the animals are well cared for by their owners, the seven hundred tons of hay put up last summer was sufficient.

The prospect for hay this season appears fair.

In appearance the Indians are at all times well dressed and clean. They make birch bark baskets, which are good serviceable articles and answer the purpose of milk pans.

A few shingles are also made by them. These they exchange for food.

The health generally has been exceptionally good, there being no sickness amongst them during the year. The births are three in excess of deaths.

The school is under the direction of the Roman Catholic mission. Average attendance during year, good, and the progress made by the pupils in their studies fair. The school has been closed since April last, on account of the teacher resigning, but will be re-opened after the summer vacation by a new teacher.

All the members of this band belong to the Roman Catholic faith, and attend the services regularly.

ONION LAKE AGENCY.

The department herd now numbers 755. The stock is in good condition. All the beef supply for this agency has been taken from the herd. A few head have also been sold.

The buildings at Long Lake, winter quarters for herd, are large, warm and comfortable, being located in a spot which is well sheltered from the winter storms. In the vicinity of the stables there is good water. This spring the buildings have all been repaired, and an additional stable, with houses for men in charge, have been erected.

Agency Buildings.

The agent's house, clerk's house, store houses, blacksmith's shop, carpenter shop and carriage house, were all painted this spring. The stables (four) and log houses have been repaired.

The saw and grist mill is in good order. A new picket fence has been placed around it.

I have the honour to be, sir,
Your obedient servant,
GEO. G. MANN,
Indian Agent.

INDIAN AGENCY,
EDMONTON, ALBERTA, N.W.T., 30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my annual report, together with tabular statement and inventory of government property, for the fiscal year ended 30th June, 1895.

Enoch's Band.

All the able-bodied men on this reserve are farming, and the locations of their places are all chosen with a view to permanent settlement. An increased acreage was seeded this spring, in fact I never saw the Indians so anxious to put in a crop. In many instances new seed grain of first-rate quality was bought by them out of their own earnings, this being done of their own free will and not through any persuasion on my part. This to the outside public may seem but natural, but any one who is conversant with the Indian character will know that a great change must have come over the Indians for them to act in such a manner. It is but a few years ago when seed grain was supplied by the government, and then it required considerable pressure to induce the Indians to sow it. There is also a great improvement to be noticed in the method of farming. The fields are all well fenced and ploughed and are kept free from weeds. Every family has a garden containing different kinds of vegetables, and in some cases tobacco, the latter having been grown from the seed of the plant raised at this agency last year. The crops all round look very promising, and the cattle are in first-rate order.

The houses on this reserve are all whitewashed, and are kept very clean. William Ward, headman, has put up a very good log house, double-storied, twenty feet by twenty-six feet, and containing four good rooms. This man's wife is a good housekeeper, and keeps the place very tidy. In fact all the younger women of this band take pride in keeping their houses clean, and are generally neat and tidy in their persons. All of them can sew and knit, and a few have learnt how to spin. This last industry should be a source of comfort and profit to all the women, as there are sheep on this reserve. A few of the women make butter regularly, and keep poultry. Mrs. Ward and Mrs. Charles have been very successful with their fowls, and have each raised about fifty chickens. The former woman, who is a widow, and a particularly thrifty woman, has received during the past twelve months $130.00 in payment of cattle sold to the department. This money was all expended in a judicious manner. These Indians have improved very much in their manners, and are always very pleased to see any one at their homes, this being a great contrast to their behaviour in the olden time. The men all wear their hair short, and have discarded the blanket as wearing apparel. Both men and women are very good church-goers, and their behaviour during the services often draws favourable comment from the white portion of the congregation who may happen to attend the same church.

Michel's Reserve.

One very good house was built last fall by an Indian called Lewis Callihoo. This building would be a credit to any white settler, being a double-storied house, and containing a large bed-room, sitting-room, kitchen and larder, all of which are kept scrupulously clean. The rooms all contain some good furniture. The site of this house is a very good one, there being a running spring of water within a few yards from the front door. The stables are close to this spring. The wife of this man is a first-rate housekeeper and her cooking will compare favourably with that of any white woman. She keeps hens, ducks and geese, and milks five cows regularly. Her butter, of which she makes a quantity, commands a quick and ready sale. All the families who are living permanently on this reserve go in for mixed farming and are fully alive to its advantages. It may be of interest to the department to learn that one of the sons of Chief Michel was employed as a carpenter on the mill building which has just been erected at this agency. This lad was brought up at the Industrial School at High River, and his carpentry work is certainly a proof that the training he there received has not been thrown away. I am sending a cupboard made by this boy to the territorial exhibition. The cattle of this band are in good order and no losses were sustained during the winter months.

Alexander's Reserve.

This band also was very desirous of putting in a good crop this spring, and an increased acreage was seeded in consequence; some of the members of this band have very nice farms indeed, and are very glad and proud to show visitors their houses, stock and fields, which is certainly an indication of their advance in civilization. The women as a rule are clean in their persons and well dressed. They can all sew and knit, and a few of them are commencing to make butter and to keep poultry. During the winter months the men occupied their spare time in making axe handles, sleighs, ox-harness, and chairs. Two men, Beaverfoot and Edward are particularly handy at making these articles. The cattle came through the winter very well and are all in very good condition.

Joseph's Reserve.

This band lives principally by hunting, consequently the farming done is only on a very limited scale. These Indians, if nomadic, are quite civilized, and the houses are kept very clean. The women are very tidy in their dress, and expert in all kinds of needle work; a few of them milk their cows and make butter. The land that was seeded this spring was well worked and fenced; as usual the cattle have done very well, very few losses having occurred. The day school is still in operation and has had a fair attendance.

Paul's Reserve.

This reserve has still no farmer, so the Indians are placed at a disadvantage as far as farming is concerned. However, they are anxious to do better, and are becoming more civilized. Some of the women sew and knit and keep their houses cleaner than formerly. The stock were well wintered and are in very good order. I am glad to be able to report that the day school on this reserve has had a good attendance and that the progress made by the pupils has been very satisfactory. The teacher, Mr. W. G. Blewett, takes a great interest in his work. The boys are taught carpentry, the girls sewing, knitting and spinning. The children who attend the school regularly are already beginning to speak a little English out of school hours.

St. Albert Industrial School.

This school is kept scrupulously clean, and every Indian child who has been there six months can speak English. A brass band was organized last year, the members of it being boys under fifteen years of age. Under the able conductorship of Mr. Varin (one of the teachers) they have made rapid progress, and have been asked to play twice outside of the institution, once in Edmonton on the Queen's Birthday, and again on 1st July at South Edmonton, when the town council were so pleased with their programme that they made them a present of twenty dollars. On the whole, this industrial school is a great success, considering the limited means it has at its disposal and deserves to be well encouraged by the government. The great wish and ambition of those at the head of this school is to have a complete printing outfit, as they have at some of the other industrial institutions. This idea, I think, is a very good one, as not only can the art of printing be taught, but it would be the means of enabling them to publish a monthly paper and other matter, to give the public an idea of the work carried on at such places, and what the government is doing for the Indians.

At the agency a building for a grist-mill has just been erected, nearly all of the work having been done by Indian labour. The prospect of this mill has done much to encourage the Indians to do more farming. The garden is looking very well and contains many varieties of vegetables. A new fence has been put round the agency buildings. I am sending six kinds of tobacco to the Territorial Exhibition

together with grain, grasses and articles made by the Indians. The Indians are sending three pounds of tobacco which has been cultivated and cured by themselves to the Lieutenant-Governor of the North-west Territories, which he will receive at the opening of the exhibition. The Indian women will send an immense bouquet of the wild flowers of the prairie to Mrs. Mackintosh.

Owing to the earliness of the season, the agricultural exhibits will not show to advantage and will not give a full idea of what the Indians are doing in the way of agriculture.

I have the honour to be, sir,
Your obedient servant,
CHAS. DE CAZES,
Indian Agent.

INDIAN AGENT'S OFFICE, TREATY No. 6,
SADDLE LAKE AGENCY, ALBERTA, 30th June, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my sixth annual report of this Indian agency, together with tabular statement and inventory of all government property under my charge.

Seven Indian bands still remain under the control of this agency. The census of last year showed six hundred and ninety-eight souls—this year the number is increased to seven hundred and one, by births in excess of deaths on the reserves.

Saddle Lake Band, No. 125.

Owing to the very dry and excessively hot summer of 1894, which was general throughout the Territories, the crops harvested by this band were not nearly so good as expected, viz.:—three hundred bushels of grain and one hundred and forty-five of roots. The hay cut and stacked amounted to six hundred and twenty tons, which proved a sufficient quantity to supply the cattle during the past winter and spring months. Up to the present time there has been an increase of sixty-one calves from eighty-seven cows, and some of the cows have yet to calve. These Indians are the best conditioned in the agency. They possess of their own one hundred and fifty-eight head of cattle, in addition to ninety-eight held under control of the department. Besides these, they own thirty-two horses, six carts, fourteen sets of harness, one disk harrow, four mowers and horse rakes, ten pairs of bob-sleighs, six wagons and one buckboard; also a number of churns, creamers, and other utensils necessary in the manufacture of butter. In this industry they are, this year, largely interested. One Indian milks eighteen cows and goes regularly to market with this product. Another milks ten cows, from which he makes not only enough butter to supply the wants of his large family, but also to pack quantities away for future use. Both of these families are self-supporting. The remainder of the band are milking from two to six cows and every one of them is now regularly making butter. The liberal supply of salt which the department forwarded for the use of the Indians of this agency has made the manufacture of butter a principal industry, and the Indians themselves now recognize the benefits which accrue from the possession of good, well broken milkers. Among the stock of this band there have been but trifling losses. Excepting five spring calves, which died from dysentery, two animals only, or about one per cent, were lost—an admirable showing, and a proof of the attention which has been given to tending the cattle. I have nothing but praise to bestow on this band.

With one solitary exception, the men are unremitting in their industry, and the women are good, careful housekeepers; but little complaining is heard from these people and all instructions are willingly and cheerfully carried out by them. The majority regularly attend the religious services of the Methodist Church, of which they are members, and they appear to be devout and consistent worshippers. They adopt altogether the garb of civilization; the men wear their hair cut short, and, among the women the use of bright coloured pigments and brass wire for adornment, has fallen into disuse. These Indians now recognize the necessity of having their children educated and taught useful industries. At present, in addition to the sixteen boys and girls on the roll of the day school on the reserve, there are ten pupils in the Red Deer Industrial School and two at the Roman Catholic boarding school, Lac la Biche, which is very creditable to a band with a total membership of ninety-one.

In my regular visit I always find the houses on this reserve clean, the tables and benches scoured, the floors scrubbed, the house utensils clean, and the beds neatly made, while the surroundings are usually free from accumulations of refuse. The fields are strongly fenced, and every man on the reserve is either building new stables or enlarging or adding to the old ones, in order that the increasing stock will in the approaching winter have ample stable room. There are eighty-six acres under crop this year.

Wahsatanow Band, No. 126.

The membership of this band is now reduced from twenty-seven to twenty-three, by commutations and deaths. During the past year these people almost entirely supported themselves by hunting,

Blue Quill's Band, No. 127.

This reserve adjoins that of Saddle Lake, and its crops suffered, as did those of the latter reserve, during the hot summer of last year. Two hundred and four bushels of grain were harvested, and one hundred and sixty-two of roots. Five hundred and twenty-one tons of hay were cut and stacked, sufficient to feed all the stock well into the month of May. This band holds one hundred and fifty-eight head of cattle, all of which are under the control of the department. The increase, so far, is forty calves from forty-four cows, but some of the two-year-old heifers have yet to calve. Four new dwelling houses and four new stables have been completed, and one more dwelling and six additional stables are now in course of erection. When the latter are finished, there will be plenty of room to house the increased herd next winter.

Of private property, these Indians possess twenty horses, five carts, five sets of harness, three mowers, three horse-rakes, five pairs of bob-sleighs, two wagons and one buckboard. All the Indians of this band who have cows are making butter, but not to nearly so great an extent as the Saddle Lake Band. They have not nearly as many cows as the latter, and those they have are more widely distributed; nor do they display similar enterprise. The number of acres under crop this year is sixty-one. The fences inclosing the fields are both high and strong. The houses are kept clean and tidy. The men are more backward in the matter of dress than the women. These are good housekeepers; they are always neatly attired in print dresses and shawls, and are the best dressed women in the agency. A few of the men are difficult to control, and have proved a disturbing influence in the band; but the remainder are obedient, attend to their several farms and to the care of their stock.

This reserve suffered so much from a scarcity of water last winter and in the previous one that a few of the Indians built stables close to the Saskatchewan River and on a creek two miles distant from the main cluster of houses; while the remainder had to drive their stock this distance daily to water. This summer two wells have been bored at convenient distances apart on the reserve—one to a depth of 65 feet, with a flow of 35 feet of water, and the other to a depth of 130 feet, 75

feet of which was through freestone, with a constant flow of 20 feet of pure spring water. These wells have been supplied with buckets, tackle and wheels; houses will be built over them, and large watertroughs made, so that in the future there will be abundance of good water for all of the stock during the winter months.

The Indians of this reserve are, too, taking great interest in the education of their children. There are 18 children on the roll of the day school on the reserve and 7 pupils are attending the Roman Catholic boarding school at Lac LaBiche.

James Seenum's Band, No. 128.

In the spring of 1894, the growing crops on this reserve showed prospects of a splendid harvest, but the want of rain and the extreme heat of the summer caused the premature ripening of the grain, and the consequence was a stunted growth. Of grain 716 bushels were threshed, and 752 bushels of roots gathered. This year 258 acres are under crop.

Since my last annual report six new dwelling houses and two stables have been erected, and at present the majority of the old stables on the reserve are being enlarged. There were 32 acres of new land broken, a task which involved considerable labour, as standing timber had to be cut and boulders, roots and stumps removed. The acreage fenced in has been increased from 1,300 to 1,500 acres.

To the visitor to this reserve the picture presented to his view is a pleasant one: an extended village with a shore frontage of three miles on Good Fish Lake, and a like frontage at Whitefish Lake; a beautiful stretch of water surrounded on three sides by lofty wooded heights, with a fathomless bottom, and swarming with whitefish, pike and pickerel. The Indian houses are at easy distances apart, and close to each house is a stable and corral, and, adjacent, a neatly laid out field inclosed by a well-built fence. The dwellings are all whitewashed, are kept clean and trim, and the surroundings kept free of refuse.

In the centre of the reserve, situate between Goodfish Lake and Whitefish Lake, are the farm buildings, a dwelling house, stables, sheds, grist and saw-mills, granary, storehouse and engine shed; also a timber yard, a well filled pond, a well and a running creek adjacent. All of these are inclosed with a well built fence, with the creek as a boundary on the north side. This is an extensive reserve, with a population of three hundred souls. On it are seventy-three Indian dwellings and fifty stables, and it has a frontage of ten miles. The live stock are numerous. Under control of department are one hundred and eighty-six head of cattle, and the personal stock of the Indians consists of one hundred and thirty horses and two hundred and twenty-three head of cattle of all classes. From one hundred and eighteen cows the yield of calves to date is seventy-two, but this does not at all represent the product of the current year. About one-sixth of the band are Roman Catholics and about five-sixths are Methodists. The latter have a commodious church, in which regular religious services are conducted by the resident missionary on Sundays and occasional week evenings. There are two day schools on the reserve, under the auspices of the same church, with a roll of fifty-five pupils. In addition there are ten scholars attending the Red Deer Industrial School and three the Roman Catholic boarding school at Lac la Biche.

In addition to the many advantages which these Indians enjoy, they have for about forty years had that of religious instruction, as the missionaries of the Methodist persuasion have been working among them for about that length of time. They are all professing Christians, and their progress should in consequence be assured. The greater number of them have discarded the Indian dress and adopted that of the whites. The women wear dresses and shawls. They are industrious and thrifty, and the general cleanliness of the houses is an evidence of good training.

Chippewayan Band No. 130.

This band now numbers sixty-nine in all. No assistance was given to these Indians this year, as their catch of fish and furs proved sufficient for their comfortable support.

Beaver Lake Band No. 131.

The membership of this band in the year just ended has decreased from one hundred and eight to one hundred persons, caused by transfers to other bands and by deaths in excess of births. These Indians received no assistance from the department since my last report. Last winter they made a request for flour, and I promised to send them a supply if they would go to work and manufacture shingles. This they promptly refused to do, and the assistance was withheld.

Cattle.

The cattle on the reserves are in prime condition. At Whitefish Lake Reserve there was a slight shortage of hay at the close of the winter, and I had about thirty head of young cattle driven to Saddle Lake Reserve, where there was abundance of hay, and all of the stock wintered well and without any serious casualties. The number of cattle of all classes in hands of the different bands is now 879, against 678 last year. The losses, during the year, exclusive of a few spring calves, numbered 12, not quite 1½ *per centum*, a very favourable showing. This year's calves are large and of a superior class, due to the thorough-bred bulls now on service at the three reserves. The following animals were condemned and killed for beef for the agency, and were replaced by thorough-bred bulls and young cattle:—

Low grade bulls	3
Old work oxen	13
Barren cows	6
Wild steers	2
Total	24

The total number of calves born on reserves is 181.

Vital Statistics.

The deaths on the three reserves for the year were six adults and eight children. The births numbered seventeen. In the outlying bands, for the year intervening between the last annuity payments and the previous ones, the deaths were two adults and eleven children, while there were ten births during the same period.

During the year just ended the health of all the bands was fairly good, and there was no outbreak of any serious epidemic. During the winter months, however, there were numerous cases of influenza and colds; a large number are affected with scrofulous diseases. The number of consumptives is about nine.

Schools.

The two schools on the Whitefish Lake Reserve and the one at Saddle Lake continue under the auspices of the Methodist Church. The attendance during the year has increased, and the management of the schools and the progress made by the pupils have been most satisfactory.

The Roman Catholic day school on Blue Quill's is taught by a lay-brother of the church. The number on roll is reduced by four of the pupils being admitted to the boarding school at Lac La Biche. The remainder of the children, thirteen, are all in the first and second standards, and they are making fair progress under this teacher, who is patient, painstaking and punctual.

The boarding school at Lac La Biche continues its excellent work, and pupils receive a liberal education and a sound industrial training in this admirably conducted institution.

I have the honour to be, sir,
Your obedient servant,
JOHN ROSS,
Indian Agent.

STONY RESERVE, MORLEY, 5th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, with tabular statement and inventory of government property, for the year ended 30th June, 1895.

The first two months of the year we were busily employed putting up hay and building a fence along the eastern boundary of the reserve, some nine miles in length. The hay, owing to the drought, was very short and thin, and of a poor quality. However, we secured one hundred and fifteen tons, which proved more than sufficient to feed our weak cattle, as we had several loads left this spring, and to encourage the Indians in puting up hay, to each of those who had worked well I gave a load to sell for his own benefit, which was much appreciated by them. The fence we built will keep the settlers' cattle off that portion of the reserve on which the best hay meadows are located and will prove very beneficial to the Stonies in two ways, giving us plenty of hay and furnishing a good winter range for the south herd of cattle.

The annuity payments were made the 1st September, thereby allowing the Indians to be ready to pitch off on the annual fall hunt at the opening of the game season. This was the first year the Stonies had been subjected to the game laws, and considering that they have always previous to this spent the greater share of their time hunting, they are to be highly commended for the manner in which they obeyed the law. The department recognized this by giving them their seed potatoes, for which they had agreed to pay out of their annuity money.

They, with the exception of a very few old and sick, all left the reserve immediately after the payments and did not return until Christmas and New Year's when they held their annual gathering. In the meantime they sent back a few old women to take up their potatoes, which were a very poor crop. The other grain sown was also a complete failure and was all cut green for feed; but this is not of much consequence here, as we do not pretend to farm, giving all our attention to cattle raising. On the Indians' return to the reserve they reported a fairly good hunt, having killed plenty of deer, sheep, moose, &c., giving them plenty of meat but not so many fur bearing animals as previous years. They remained for a few weeks when a large number went off again, as the season for lynx and bear had then set in.

In the spring, chicken-pox and whooping cough broke out on the reserve, from which a number of children died. Dr. Lindsay gave them the very best of attention, but they are careless in following out instructions given as to the manner of treatment, preferring their own primitive modes of doctoring.

The cattle, our chief line of work, have proved very successful indeed, and the Indians have thoroughly awakened to their value. We supplied the beef entirely for the first six months, and have killed from one to three animals every month since, thereby furnishing the owners with a little money for clothing and other necessaries. Some have purchased lumber, shingles, doors and windows for their houses, others wagons, saddles, harness, etc., and as there is always enough money saved to replace the animal killed, our band has not been reduced. The cattle wintered splendidly; in fact, were fat this spring, and out of the whole bunch we found it necessary to feed only twenty-four head. We have an increase of 142 calves this spring, with a total number of 719 head.

We have had an exceptionally wet summer, and, therefore, the promise of an abundance of hay. We put in a small acreage of grain, which has been cut twice with the frost, but is coming on again now, but will be too late to ripen. The potatoes are looking very well.

A number of improvements have been made on the reserve during the year. The Indians have put up a number of good new houses, finishing them in much better style than their old ones, in fact, there is quite a rivalry among them as to who will have the nicest. Chief Bear's Paw has finished his house; he has displayed much taste and he is very proud of his work. It is a story and a half high, with two rooms down stairs and a stair-case leading to the upper flat. The floors are

painted, as are the window casings and the doors. He also bought a good new cook stove. As soon as the house was completed, Chief Chiniquay gave me no rest, or himself either, until he had a partition run through his house, giving him two rooms. Others are now quite as anxious, and I am much pleased to note the interest they are taking in their homes.

A new office and drug store has been built, and the roofs of all the buildings and the house (which has been clap-boarded) painted.

There are three schools on the reserve, two day and one boarding. The two day schools are under the management of the Rev. R. B. Steinhauer, B.A., and J. W. Middrie; both are doing excellent work.

The boarding school, which has Mr. J. W. Butler as principal, has also done very good work during the year. Two of the girls who have been in the institution have been discharged by the department, and the institution has now one of them engaged as cook for the pupils.

The bridge over the Bow River, which was nearly washed out last summer, has been thoroughly repaired and made much stronger than before. The cost was some $800, of which the Stonies gave $250 in money and all the timber needed.

I have the honour to be, sir,
Your obedient servant,

P. LEWIS GRASSE,
Farmer.

FORT FRANCES, ONTARIO, 1st July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to say that during the year ended 30th June, 1895, I have made the following professional trips to Indians of this agency, viz.:—

	Trips.
Hungry Hall	4
Long Sault	12
Manitou	12
Little Forks	10
N. W. Bay	2
Red Gut	2
Sturgeon Falls	6
Lac La Croix	1
Coutcheeching / Stangecoming	30

During the year I have vaccinated all who had no marks, and re-vaccinated those not recently done.

There have been no outbreaks of serious epidemics among our Indians during the year, although at one time I feared diphtheria on account of two cases at Fort Frances, and our proximity to an outbreak of the disease in Minnesota.

In the spring months of the year pulmonary diseases have been especially numerous, pneumonia carrying off several of the very old and young. Phthisis has an evident stronghold in the agency, many families being visibly affected with the disease. Their mode of living, and especially the most filthy habit universally present among them, of expectorating into, among and upon anything and everything within and about their houses and wigwams tends greatly to facilitate the dissemination of the disease. In all cases I have ordered and procured expectora-

tion cups or some form of antiseptic contrivances to be used, but the above mentioned foul habit militates against sanitary precautions being properly carried out.

There have been no cases of extreme want during the year.

The Indians are generally happy, and many of them are becoming quite industrious.

W. W. BIRDSALL,
M. D., C. M.

DISTRICT OF ALBERTA, TREATY No. 7, PIEGAN AGENCY,
FORT MACLEOD, 16th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report concerning affairs of this agency for the year ended 30th June, 1895, accompanied by the tabular statement.

I regret to say that our grain crop in 1894 was almost a total failure, only four hundred and seventeen bushels of grain was harvested from one hundred and thirty-one acres sown. The crop of potatoes was, however, very good, nine hundred and thirty bushels being the total amount harvested. Hay was very hard to procure, but the Indians worked well and succeeded in putting up three hundred and forty-seven tons.

Having had so many crop failures in this locality for several years, I considered it inadvisable to put in a large amount of grain this spring; the farmers, however, have taken great pains in assisting the Indians to put in a really good root crop.

In order that we may be able to grow grain another year we have all been working hard at an irrigation ditch, bringing the water from Beaver Creek and the Old Man's River, a total distance of about three miles. If successful, this ditch will prove most beneficial to a good part of the agency, and every effort is being made both by Mr. Farmer Smith, under whose direction it is being made, and the Indians, to render it a success. Four good dams have been constructed. Mr. Smith has had sometimes eight Indian teams and thirty Indians working together at the ditch.

During last summer the Indian cattle owners turned in some good beef, almost enough for a two months' supply. With the money which they received from the department in payment for this beef, several men purchased wagons, mowers, rakes, etc., for their own use. A good quantity of rain having lately fallen, I trust that the hay will this year be more plentiful; no animal, however, was lost during last winter for want of fodder. The Indians looked well after their cattle, and are most anxious to become large stock owners. I have lately traded fifty head supplied by the department for fifty Indian ponies. The herd now consists of eight hundred and sixty-eight head of cattle.

Besides taking care of their stock, the Indians have done a fair amount of work during the year. All freighting of supplies, etc., has been done by them, and a great deal of timber cut and partially hauled from the timber limit eighteen miles off: two thousand three hundred and fifty-eight house logs, one thousand five hundred and seventy-eight stable logs, two thousand four hundred posts, nine thousand eight hundred and twenty-six corral posts and rails. A great deal has been done to improve the reserve, some milk houses built, wells dug, good corrals and stables put up. The Indians have earned $1,126.21 in various ways, such as freighting at 15c. per cwt., working for settlers, receiving bounty for wolves killed, etc.

I noticed with pleasure that the Indians, on the whole, spent thier annuity money in a very sensible way, buying furniture, steves, dishes and other things for the improvement of their houses, many of which now present a very comfortable appearance. The women are now beginning to be more cleanly, and to take more pains to keep their homes tidy. They are also beginning to make yeast bread.

Mr. Farmer Cox has taken great pains to instruct the women in this matter, with the result that twenty-five women were making very good bread throughout the winter.

Educational matters are not as favourable this year as last, chiefly owing to sickness amongst all the children, many of whom have had to be removed from school altogether. St. Peter's Boarding School, under the management of the Rev. J. Hinchliffe, is doing good work in training the children. The boys at this school are now being taught carpentering by a master mechanic, who has erected a good joiner's shop. Many of the boys can turn out very good work. The girls are taught all manner of housework, baking, etc.—some of them being allowed to bake their parents' bread—sewing, knitting, mending their own and the boys' clothes. The day school under the Rev. Father Foisy, assisted by Brother John, is doing fairly well, the teachers do their best, the progress made is fair, but the attendance bad.

Since my last report a good kitchen has been added to my house, making it very much more comfortable. Some outbuildings and a tidy picket fence have been put up. The employees are comfortably housed.

No change has been made in my staff of employees, all of whom have rendered me great assistance during the year by the careful performance of their duties.

The interpreter, Mr. Dunbar, is fairly proficient in the language, and is besides a very good all round man, and is often able to do carpentering, etc., which would otherwise have to be paid for.

The clerical work of the office and the issuing of rations have been performed in a most satisfactory manner by Mr. Maxfield.

I have the honour to be, sir,
Your obedient servant,

H. H. NASH,
Indian Agent.

DISTRICT OF ASSINIBOIA, N.W.T.,
CROOKED LAKE AGENCY, TREATY No. 4, 20th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my eighteenth annual report, with tabular statement, and inventory of government property under my charge, up to the 30th June, 1895.

As prognosticated in my last report, the crop harvested during the current year has proved very light as will be seen from the following table:—

Reserve.	Band.	Acres Sown.	Bushels Threshed.
71	Ochapowace	102¼	205
72	Kah-ke-wis ta-haw	113½	270
73	Cowesess	255¾	1,300
74	Sakimay	70½	188
		542	1,963

This was entirely due to the extraordinarily dry season, which was the dryest I have seen in this country for the past twenty years.

Of the foregoing number of bushels threshed, only one hundred were of oats and fifteen barley, the balance being wheat which was disposed of as follows :—

	Bush.
Sold to purchase food, clothing, &c.	457
Gristed into flour	470
Sown	690
Cleanings and shrunk grain fed to poultry	220
Still on hand	11
Total	1,848

I have harvested about fifteen bushels of oats for the agency horses, and the farmers raised only eighty bushels for the maintenance of their horses. The comparative failure is owing to the dry season.

Notwithstanding the poor crop of the previous fall, the energy of the Indians has not diminished, as the following acreage sown will show :—

Band.	Acres.
71. Ochapowace	101
72. Kah-ke-wis-ta-haw	124
73. Cowesess	253
74. Sakimay	86½
Total	564½

This is a greater acreage under crop than last year by 22½ acres, and the crop has been properly put in on land better prepared than in any previous year, and with the present favourable weather a remarkably good return may be expected this coming harvest.

There are now 95 acres summer-fallowed in the most approved method, and the Indians are in very good heart about their work. There will be soon a considerable amount more land in first-class condition to receive the seed next spring.

The effect of a good crop will be surprising on the improved condition of these Indians. They have sown 64 acres with oats, all of which promise well. I have sown seven acres with oats for the use of the agency team, on summer-fallow, which at present promises a splendid result. The farmers have sown 18½ acres with oats, and their crops all look well.

The hay crop, owing to drought, was a poor one, although sufficient was obtained to winter all the stock comfortably, with the exception of about 90 head belonging to members of Cowesess's Band, No. 73, which was occasioned by the unusual event of a prairie fire in July, which destroyed a considerable portion of the hay. I at once made arrangements to send off those Indians who were thus deprived of hay to Leech Lake Reserve, about 40 miles north, to cut and stack as much hay as possible, under the supervision of their farming instructor, Mr. Sutherland. They succeeded in putting up over 200 tons of hay, and the cattle were well wintered.

The Indians and cattle were supervised very efficiently by Mr. Moore, who lent them sheds and allowed them access to a splendid supply of water on his farm. The rest of the cattle on all the reserves did very well, the stables being warm and the supply of water sufficient.

One well was dug during the winter on Kahkewistahaw's Reserve, No. 72, owing to a supply running short that had never failed before, and great credit is due to the Indians for their perseverance in completing what was an unpleasant undertaking in the depth of winter. The need was urgent, they rose to the occasion, and their efforts were crowned with complete success.

Two wells had to be operated on Ochapowace's Reserve also; but unfortunately quicksand stopped the work, and I was unable to get sufficient lumber in any of the towns to crib them. A thaw took place at a critical time, and the cattle did not suffer, as the Indians stored water and were able to improve the wells. They also deserve much credit for the steady way they worked under disadvantages.

The number of stock in the hands of the Indians, both under government control and their private property, is as follows:—

	Govt. control.	Private.
Canadian horses		17
Native horses		190
Bulls	3	1
Oxen	99	1
Cows	115	32
Young cattle	258	173
Sheep	34	
	509	414

This is a net increase since 30th June, 1894, of fifteen head, and is thus accounted for:—

	Increase.	Decrease.
Colts, calves and lambs born	122	
Purchased to replace	10	
Died by accident		20
Killed for beef, etc		40
Sold by Indians		57
To balance		15
	132	132

This is not a large increase considering the total number, and I am pleased that such is the case, as it shows that the Indians are understanding that it is more advisable to improve their herds—keep fewer and better stock, and if they are to take better care of improved stock, they have at present as many head as they can profitably maintain. The more advanced have latterly listened to this propaganda, and one of the largest holders of stock is absolutely selling his herd by degrees, and endeavouring to pick up really good cows to replace, and others are looking in the same direction. The sheep have not made a great increase. There were sixteen lambs this spring, all doing well. There were five sheep killed by wolves, eight eaten for mutton, and two died from accidental causes, leaving therefore an increase of one for the year. The sheep are all looking extremely well.

Two cases of sickness amongst the native horses on Cowesess's Reserve, No. 73, were reported to me as suspiciously like glanders, which I reported to Dr. Wright, government veterinary inspector, who condemned both animals and shot them. They were both carefully burnt and stables disinfected, and every precaution taken to avoid infection, and I am glad to say no sign of anything of the kind has appeared. The two cases were old horses, purchased and lately imported into the reserve.

The pedigree Galloway cow supplied me last year had a heifer calf on 15th October, 1894, sired by "Halton," No. 8803, and it is now a beautiful young heifer in splendid growth and condition. I had this cow and calf wintered in my own stable. The bull calf, which came with the cow, was wintered by Farmer Pollock at farm 3B, and will serve a limited number of cows this season. The two Galloway bulls supplied to me the year before last were carefully wintered and are in good order. Their stock is nearly all black and are very hardy. The red pedigree Durham bull was also well wintered on Ochapowace's Reserve, and is now in very good order.

The hay harvest promises to be excellent this summer, and the crop abundant.

The amount of individual earnings from the 30th June, 1894, is $6,050.14, as set forth in the following statement:—

9528 lbs. beef sold	$ 571 68
Cattle, 57 head	1,322 30
Firewood, 522 loads	885 82
Hay, 394 loads	1,020 65
Tanning 25 hides	67 50
Wheat, 457 bushels	213 69
Wool, 145 lbs	11 10
Work, wages, etc	58 00
Senega root	1,609 40
Horses, one pony	15 00
Furs, approximate value	275 00
	$6,050 14

There were more hides tanned, and work for wages, etc., done than came under my official notice; but the above will serve to show, better than anything else, what my Indians have been doing towards their own support, and the following table, showing the manner in which the money earned was spent, will, consequently, be of interest:

Payments on account of Canadian mares	$ 115 00
Lumber for houses	50 00
Payment on account of binders, mowers, rakes, wagons, etc	706 86
Provisions and clothing	5,178 28
	$6,050 14

The financial position is practically the same as last year, very little advance being made, which is owing to the poor harvest last fall, and the late general depression; but there is a distinct advance in so far as that the amount of debts due by Indians has been very materially reduced, so that were they in receipt of a good crop, very little would have to go to pay old debts, and the good results would be apparent at once, in better houses and general prosperity.

Every year shows that these Indians, at any rate, are realizing the fact that it pays them better to mind their own business, and stay at home, instead of so much visiting, which was the great drawback a few years ago. It is by no means as it should be yet, but our motto is, and must be, Patience! The greatest trouble I have in this respect is the dairying interest. Many Indians start in the spring, when the cows calve, to become butter makers, but something takes them away for a few days (not necessarily off the reserve) and the interest flags, and then they get word that some relative on another reserve is sick, and they must visit the sick one at any cost, and, if restrained, they give up their efforts and get sulky, but, "exceptions prove the rule," and there is a marked advance this summer. One Indian woman came and asked me to lend her some old butter tubs, as she has already some sixty pounds stored away for winter, and is going on still, and there will be a few more who will have all the butter they want for the winter. There are four new milk houses put up this summer, and one of them on a large scale. If this increases, I shall have to turn my attention to the question of "cold storage," as the Indians could easily make two thousand, or more, pounds of butter if it suited them to apply themselves in that direction. I am leading up to this, but, as the department is aware, it is lost labour to drive an Indian.

I got a basket last year as a pattern, of a size suitable for carrying clothes, and I got an Indian woman to make a very good attempt at a copy, but the technical skill was wanting, and the handles and edges, at top and bottom, were uncouth.

Two kilns of lime were operated this summer very successfully.

The catch of furs is so small now as to be of no account in finance.

Fishing is the same as in the last few years past: the Indians catch sufficient for their wants. Three of them have taken out licenses, but do not sell any of those they catch by net. There is no sign, as I can ascertain yet, of how the white fish from the Selkirk Fish Hatcheries (that were put in a year ago) are doing in Round Lake.

The number of children attending school is seventy-eight, distributed as follows:—Regina Industrial School, eight; Fort Qu'Appelle Industral School, forty-one; Elkhorn Industrial School, nine; Round Lake Indian Boarding School, twenty.

The number of children of school age is one hundred and eighty, and if infirm children and those of She-Sheep's party (whom the parents will not allow to go to school, numbering about forty) are deducted, there are not very many left who should be at school and are not, and this number I am lessening. It is needless to say my attention is constantly turned to the important question of getting the children to school.

I visited Mr. McKay's school monthly, and always found progress was being satisfactorily made.

The grist-mill commenced running on the 3rd of December, 1894, and ran until about the middle of the month, when it was deemed advisable to close it until about the middle of March, chiefly to avoid gristing in the very cold weather, as such good results are not then obtained. This cannot be done every year, but in this case the crop was poor and there was not so much to grind.

I again hired Farmer Sutherland's son to run the engine, paying his wages out of the earnings of the mill, by the sale of shorts and bran.

This mill has now been run for two years, most successfully, being a great boon to the Indians, and has not cost the department the outlay of a single dollar.

The machinery was in perfect running order when gristing commenced, and was left in the same state ready for next year's operations.

I append a table which will show at a glance what wheat was received and what became of it.

Wheat received.	Toll taken.			Product to Indians.		
	Wheat.	Shorts.	Bran.	Flour.	Shorts.	Bran.
Bushels.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
495	30	2,640	1,256	19,730	2,639	2,133

The average cost to the Indian for grinding his flour was about seven and a half cents per bushel on his wheat, which was paid in shorts, bran and firewood.

The sale of the toll taken exactly paid the running expenses of the mill.

The threshing commenced in good time last fall, and, owing to the light crop, was soon finished.

The payments of annuities commenced on the 2nd of November and ended on the 7th, the different bands being paid on their separate reserves as formerly and in the same order. The number paid was five hundred and eighty-seven, being an

increase of thirteen over the previous year, caused by a preponderance of births over deaths, and nine Indians returning to the reserve.

The amount paid out was $3,210, including $155 for arrears.

The behaviour of my Indians has been very good, with two exceptions. Ah-wen-a-pow, an Indian of Kah-ke-wis-ta-haw's Band, struck an Indian woman of the same band. I had the Indian brought before me, and fined him $5 only, as he expressed penitence. The other case was one of drunkenness (the first I ever had occasion to deal with). A Swede had introduced whisky into their teepee, whilst camped near Broadview. The Swede and Indians implicated were arrested, and I tried them, in conjunction with Mr. Hodson, J.P., and sentenced them to various terms of imprisonment. As this is the first case of the kind, I trust it will be the last. I think the warning to Indians and settlers will be beneficial.

The health of the Indians during the year has been normal. There were only a few requiring vaccination, and the doctor attended to them at the payment of annuities.

I am glad to be able to report that there is a marked improvement in the cleanliness and arrangement of many of the houses of Indians in this agency, and this is appreciably due to the presence of daughters home from school. Some of these girls have very lately married, and I hope in my next annual report to go fully into this matter, and that my report will be as favourable as the present indications seem to foreshadow.

The gardens in this agency, both Indians' and employees', are superb; I have never seen them better, and they are a sight well worth seeing. Some of the Indian gardens are well laid out, weeded and kept, and there is a most decided improvement this year in this respect. The great difficulty is to get the Indians to understand how necessary it is to thin out the young growing plants, to give th e others room to grow, but they are every year appreciating the value of garden produce more than formerly.

It may be of interest to note here that my Indians have nine binders, twenty-four mowers, twenty horse rakes, thirty-seven wagons and two fanning-mills, all in first-class condition and order, their own private property, they having paid for them themselves out of their own earnings. This represents (at a very low average) over $4,000.

The second blacksmith forge, supplied last year, and placed at Farm 3B, although small, has proved, as expected, an almost inestimable benefit, as all the repairs necessary for Kah-ke-wis-ta-haw's and Ochapowace's Reserves have been done at this forge, instead of having to be hauled all the way to the agency, with a chance of the forge there being fully occupied with quite as important work for the other reserves. The saving of time for both Indians and employees has been very appreciable, and the results are much greater than if only one shop were in existence.

The farm house at the agency (3A) has been shected with lumber all over and painted this summer, which was very much needed.

A large carpenter's shop for the use of the Indians is being erected at Farm 3D, Saskimay's Reserve. This will be a very fine building when completed, and the cost to the department will be very small, as the Indians, assisted and directed by the farmer, will do all the building, having hauled and erected the logs. The Indians are much pleased about it.

Poultry keeping is well on the increase, and during the year some very good winter fowl houses have been built. Several Indians have from thirty to fifty head of good strains, which they look after well. I am doing all I can to induce other Indians to keep poultry.

The Indians have planted four hundred and twenty-five bushels of potatoes this spring on twenty-seven acres of well prepared land, which should give a very heavy yield if the present favourable conditions continue. The department assisted them to the extent of one hundred bushels for seed, and they purchased two hundred and thirty-seven bushels for seed themselves, as they only had eighty-eight bushels left of last year's crop, owing to that crop being so poor, on account of the dry season.

Sick leave was granted to me from the 16th of February to the 1st of April, at which date I returned to duty. During my absence Mr. Pierce, the agency clerk, attended to the office duties of the agency for me, which he did very satisfactorily.

The office books are kept, as usual, in a very neat and correct manner.

The farmers have also faithfully attended to their duties.

I have the honour to be, sir,
Your obedient servant,
A. McDONALD,
Indian Agent.

DISTRICT OF ASSINIBOIA, TREATY No. 4,
FILE HILLS AGENCY, 6th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report for the year ended 30th June last, together with tabular statement and inventory of all government property under my charge.

In accordance with instructions received from the department, I left Battleford Agency on the 18th December last, and arrived here on the 27th of same month, taking the place of Mr. Agent Wright, who was transferred to the Touchwood Hills Agency.

This agency comprises four reserves, with two hundred and sixty-one souls.

These Indians have five hundred and sixty-seven head of cattle, ninety-five horses and eleven sheep, which is a remarkably good showing for the number of Indians, and goes to prove that they are taking a great deal of interest in this important industry.

Many of these Indians get no assistance from the government and make a good livelihood from the sale of beef, hay, firewood and seneca root.

Owing to the drought last year the crops were a total failure, and these Indians had to depend solely for their living upon the sale of beef, hay and firewood.

Besides supplying their own beef, they sold a quantity to the Assiniboine Agency and the Qu'Appelle Industrial School.

They had under crop last year one hundred and fifty-two acres, and this year one hundred and sixty-four, which goes to show that the dry seasons have not yet discouraged them.

Their earnings for the whole year amounted to $2,260.

Their principal industry, however, is cattle-raising, and the herd has reached such dimensions that the most of their time will have to be devoted to this particular branch.

One thousand and fifty-six tons of hay were secured last year, which proved ample for all purposes, and the cattle wintered well. I have during the past winter given especial attention to the Indians' mode of living, and have in many cases caused them to improve their dwellings and surroundings.

As soon as spring opened, all refuse matter around their dwellings was collected and burned, and their houses both inside and out received a good coat of lime white-wash.

Several Indians here have abandoned almost entirely the manners and customs of their race, and many of their homes present more the appearance of the white settler than the Indian, being furnished with bedsteads, tables and chairs, and some have good cooking stoves.

Four Indians named "Mowstoosekope," "The Flag," "Tuckwaynow" and "Peekutch" have each a team of Canadian horses, earned by themselves; each has a wagon, harness, bobsleighs, mower and horse rake and is now better equipped than many white settlers in the country, and all obtained from their own labour, which I think goes to show that the constant supervision over these Indians is making itself apparent and showing its good results.

My aim is to get the other Indians to follow in their footsteps, and, in my opinion, it is only a question of a very short time before the majority of these people will be quite as advanced in the way of civilization as many of their white neighbours.

"Simon Crowe," a pupil of the Qu'Appelle Industrial School, returned to his reserve last fall on leave of absence for the purpose of looking after his uncle's stock.

The training he received in that institution is very marked. He is very industrious and looked after the cattle as well as any white man could. He was always very respectful in his manner, always listened to what he was told, and when in any difficulty always came to me for advice.

When spring opened he commenced the erection of a dwelling house, as it is the intention that he will get his discharge shortly, get married and settle down to farming on the reserve.

There is no doubt in the world that his example to the others here will have a most beneficial effect.

The health of the Indians on the different reserves has been fairly good. There were during the year eleven births against eleven deaths.

There are quite a number of old people on this reserve who suffer from scrofula and sore eyes. A supply of medicines is always kept on hand and they are dispensed when required. These people are also assisted in food and clothing and they want for nothing.

The boarding school here, which is under the auspices of the Presbyterian Church, is doing good work, and Mr. Skene, the principal, is a most efficient officer.

There are fourteen pupils enrolled, ten of whom are supported by the government.

William McNab, my interpreter and farming instructor, has performed his duties most faithfully.

I have the honour to be, sir,
Your obedient servant,

A. J. M. NEILL,
Acting Indian Agent.

SWAN RIVER AGENCY,
COTÉ, ASSA., 5th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement and inventory of all government property in my charge on the 30th June, 1895.

This agency has six hundred and fifty-one Indians; during the year there occurred thirty-nine births and thirty-one deaths. The general health of late has much improved; this has been caused to a large extent by Dr. Patrick's earnest and intelligent interest in the matter. I have carried out fully his instructions and so has Rev. C.W. Whyte, principal of Crowstand Boarding School. The insistence on the sanitary care of the Indian houses and their surroundings and keeping him at work as much of the time as possible has advanced the Indian in his knowledge of what the department is trying to do for his health and benefit: having secured his faith, I expect greater results.

Education is being very fairly carried out. Coté Band has eighty-four children of school age; forty-two of these are enrolled at Crowstand Boarding School; thirty-six are attending the Regina Industrial School, and one is at the Qu'Appelle Industrial School. We lost three pupils by death at the Regina School and one at Qu'Appelle. Key's Band has forty-nine children of school age; twelve attend the day school on the reserve here, twenty-seven that on the reserve at Shoal River, and ten the Elkhorn Industrial School. Kisickouse Band has twenty-four of school age; twelve of these are on the roll at the day school on their reserve.

The earnings of the Indians have increased over those of last year, and the Indians have the will to do more if they had the opportunity, but all such resources as the selling of hay or wood (a small quantity has been sold to the school) is cut off, as we are fifty miles from the towns and settlements. In other ways they have earned as follows:—freighting and labour, $1,006.00; sale of cattle (Gordon and Ironsides), $529 00; sale of cattle to department, $127.00; sale of beef to department, $133.00; sale of beef to other parties, $164.00; seneca roots, etc., $250.00; the catch of furs by the hunters amounts to $8,000.00—in all, $10,211.98, an increase over last year of $1,188.98. The above amounts were expended as follows:—three mowers, one horse rake, five double wagons, four sets double harness, provisions, clothing, household wants, etc., some families completely supporting themselves.

Their stock consists of one hundred and forty-three horses, thirteen bulls, one hundred and sixteen oxen, two hundred and ninety-five cows, one hundred and thirty-three steers, one hundred and fifteen heifers, one hundred and fifty-seven calves (up to 30th June), one hundred and forty-six sheep and lambs; total cattle, eight hundred and twenty-nine, also the sheep and horses above mentioned. This is the showing now of the property of the Indians here (one hundred and sixty head has been consumed, sold and died), as compared to two hundred and eighty head owned by them in the year 1889, an increase in a period of six years of seven hundred and ten head. The increase in value over last year of live stock held by Indians will amount to about $4,725.

Barley is the only grain crop that can be depended upon here, with a medium chance for oats. Potatoes and other roots do well.

The Indians are advancing rapidly; they feel it themselves, that they are accumulating property of their own; they understand the value of cash in hand; they do not incur so much debt as formerly, and are more saving, and some few are close and actually mean.

I may mention a few names from a number of others that are acquiring property of their own, viz.:—Alexie Caldwell in the year 1889 had four head of stock, two oxen, a cow and a calf; to-day he owns five oxen, ten cows, six steers, two heifers, six calves (up to date, 30th June), sixteen lambs (he has twelve sheep on loan besides this), and has killed three head of cattle during the year, but now has twenty-nine head of cattle, his sheep and three horses, one double wagon, one set of double harness, one set of bob-sleighs, one mower and rake, a good house and byres, tables, chairs, etc., tools, etc.

Mrs. Favel and her son had in 1889 three head; they now have twenty-four head of stock, two horses, one set double harness; ox harness one set, one double wagon and bob-sleigh.

Kitchimonia at the former date had eight head; now he owns thirty-one head of cattle, five horses, twenty-two sheep, one double wagon, two sets double harness, bob-sleighs (homemade), one mower and rake, and he sold and consumed during the year four head of cattle.

Que-me-zance had eight head of cattle, as above; he now owns thirty-three head, twenty-one sheep, six horses, one wagon, one mower and rake, one double harness, one set bob-sleighs, cook stove, &c. He sold and consumed three head of cattle.

William Brass, sr., in 1889 had five head of cattle; he now owns thirty-five head of cattle, six horses, two double wagons, mower and rake. Last year he sold and consumed six head of cattle. This Indian has a good house, always clean, a dairy house; his daughter, Susan, milking six cows, making butter and selling it to the traders at Fort Pelly. They keep about thirty fowls and raise a number of turkeys every year.

I may mention others as proportionately well off, viz.:—Benj. Coté, Chief Coté, Sol Manitoose, John Severight, Mrs. Bird (a widow), "Kishane," "Ka-ka-kennay," John Redlake, George and Thomas Brass, and others; but these started a year or two later to take advantage of what the former did from nearly the first, but their minds are settled now.

All tribal influences have disappeared; chiefs and headmen are mere names. It is now every man for himself. Each has his own affairs, and, if he wants to speak of them, he comes to the agent and the matter is settled—no big meetings nor waste of time for days: in fact the Indians have too much property and business at their own homes to spare the time for such things. All of them on the reserves have good comfortable houses provided in most cases with tables, beds, chairs, cookstoves and open fireplaces. A large number knit; many of them make butter; it is a great exception for a woman not to milk; a number make soap from ashes; they raise and keep poultry; they live respectably and cleanly, and each band has its own church and attends in large numbers. All of the children of school age are at school, with the exception of the children of a few hunting Indians.

To sum up, the Indians here are a law-abiding and God-fearing people, most of them trying to do what is required of them as far as their physical strength and will-power admit. This has not been produced by spontaneous growth, but by hard work, worry and many anxious days.

I have the honour to be, sir,
Your obedient servant,
W. E. JONES,
Indian Agent.

INDIAN AGENT'S OFFICE,
BATTLEFORD, 9th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

I have the honour to submit herewith my annual report, together with tabular statement and inventory of all government property under my charge up to the end of the fiscal year, 1895.

My hopes and those of my Indians were greatly raised in the fore part of the season by the promising appearance of the crops, and remained so up to the first week in July, when a scorching wind passed over this agency, which lasted for several days; the result of which was a total destruction of both cereal and root crops, and not in any instance did we recover the seed sown; and again we had to call upon the department's generosity for a supply of seed for the present year, as well as food for all the Indians of the agency.

Hay, however, was a plentiful crop, of which we secured, in good order, four thousand six hundred and eighty-five tons, which was to feed some fourteen hundred head of cattle and one hundred and fifty head of sheep, besides farm horses, and I am pleased to say that, although the winter was long, we did not lose a single head.

The beef required for the use of the Indians of this agency, amounting to over seventy thousand pounds, was all supplied by the Indians and netted them in cash $4,200, which was all well spent in the purchase of mowers, wagons, food and clothing, not a single dollar being spent in useless trumpery, which might be found amongst their purchases in previous years.

The department, in its wisdom, has decided to abandon, to a great extent, the rai-ing of grain and to give more attention to root crops and the care of cattle, at least until such time as the seasons change, when raising grain will be more of a certainty than has been in the past.

The Indians have shown a decided improvement and a desire to better their condition by erecting comfortable dwellings. The Stonies, who were the most careless about their houses and homes, have this year built eighteen comfortable houses, and have whitewashed them inside and out, and floored them. Now the reserves give one the idea that their desire is to secure for themselves better homes. They have abandonded almost altogether all hope of living by the hunt, and have settled down steadily on their farms.

The Crees have also put their houses in better order and spent a most comfortable winter. Their cattle are steadily increasing and I expect the crop of calves which will appear in my next report will be in the vicinity of three hundred, the sheep are doing remarkably well and the natural increase is large.

The sanitary condition of the Indians is not as good as might be expected: the deaths exceeded the births by nineteen. There were no epidemics of any kind amongst them, yet there was and is a great number affected with scrofulous and venereal diseases, which cause more deaths than any other sickness with which they are afflicted. Dr. Macadam, the attending physician, says they are much more free from disease of any kind than they were some few years ago.

There are eight day schools in the agency and all are fairly well attended. The industrial school, formerly controlled by the department, has been handed over to the authorities of the English Church, and in future will be managed by that corporation on the *per capita* system.

I have the honour to be, sir,
Your obedient servant,
P. J. WILLIAMS,
Indian Agent.

INDUSTRIAL SCHOOL,
RED DEER, 12th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first annual report, together with an inventory of all government buildings and property under my charge.

At present we have the full complement of children, viz.: 50, and the general health of all is good.

The farm, in the charge of Mr. McLellan, has been well worked, and the crop promises to be fair.

The girls have been carefully trained under the late matron, Mrs. Nelson, and the seamstress, Miss Buelher.

When I arrived I found that Mr. Lougheed had been transferred to the Battleford Industrial School and his position had not been filled; therefore the carpenter's shop has been closed. I intend also immediately to open a shoemaking shop, when the instruction of the boys will begin.

I regret that the late principal did not make out this report, as it is quite impossible for me to know much about the school, I only arriving here to take charge on 2nd July.

I have the honour to remain, sir,
Yours obediently,
C. E. SOMERSET,
Principal.

WESTERN TERRITORIES OF CANADA, 1st July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to present my seventeenth annual report of my work of inspecting Indian agencies, reserves, farms and schools in these Territories and in Manitoba.

During the early part of the past fiscal year I was engaged in Treaty 7. I remained some time among the Bloods, Piegans, Sarcees, Blackfeet and Stonies. I also visited all the day and boarding schools upon these reservations and the industrial schools at High River and Red Deer, and made an inspection of the hospital on the Blood Reserve. All of the above work was dealt with in my report which was published in the blue-book for 1894. I will, therefore, upon this occasion commence where that report left off.

ELKHORN INDUSTRIAL SCHOOL.

The present staff of the school is:

Mr. A. E. Wilson, principal.
Mrs. Wilson, matron.
Mrs. Vidal, superintendent, girls.
Vacant, 1st teacher.
F. S. Fletcher, 2nd teacher.
S. B. Brisbee, foreman, boys' department.
Vacant, dressmaker and seamstress.
Martha Thomas, cook.
Mrs. Grontage, laundress.

Trades Shops.

W. J. Thompson, foreman, printing.
J. R. Duke, foreman, boot shop.
John Simington, foreman carpenter.
John McCracken, foreman tailor.

The positions of first teacher and dressmaker are but temporarily vacant, the late occupants of those positions having resigned quite recently.

The maximum attendance during the past year has reached ninety-six, while there has been an average of eighty-six and eighty-two hundredths. They come from all parts of the Territories, as well as from Manitoba, and represent many different tribes and nations:—there are Blackfeet, Bloods, Piegans from the extreme west and south; Assiniboines from Moose Mountains; Crees and Saulteaux from Touchwood, Crooked Lakes, Swan River and St. Peter's; Sioux from Bird Tail, Oak Lake and Oak River, and two Delawares from Moravian Town. At first there was a little shyness between the western Indians of the Blackfoot Nation and the others, but that has worn out and they all now dwell together and work and play together as one family in the greatest harmony and good fellowship.

Attention is paid to their being properly dressed while at work or in the class rooms or at recreation, and on Sundays and holidays both boys and girls appear in neat uniforms. I found them clean in their persons and a general appearance of care obtained throughout.

One pupil, Na-pia-e-mo-kin-ma, is deaf and dumb. He came to the institution in January, 1891, in a state of utter darkness. He is now eighteen years old. He can do anything in the school room that another can, and he has been taught the art of printing. He is most expert in all branches of the trade, from setting type to working off the paper. He is careful of his personal appearance and is one of the best dressed, freshest looking boys in the school.

Trades.

Boot and Shoemaking.—This shop is now well equipped with machines for making "uppers," while the usual part that is hand-made is all done by the pupils. Some of them are already good workmen, and their finished work is most creditable. Ten boys are learning this trade.

Besides furnishing the school with all the foot gear required, a considerable business is done on orders; fine riding boots for the North-west Mounted Police being a specialty.

Carpentering.—Eleven boys are learning this trade, it being the one that most of them like very much. J. Cook, J. H. Thomas and J. Cotton are already very good workmen and show considerable mechanical skill, while Joe Calfchild is a good second to them. Cook is the captain of the school football team.

Tailoring.—Five boys are learning this trade. Three of them are already quite expert, and work the sewing machine and do ordinary seams and patching very cleverly. The boys' clothes are made here, but in addition a large order trade is done, not only locally, but for almost every town as far west as Moose Jaw.

Printing.—Six boys are printers. It might be invidious to name any one when all are so good and skilful. Fred. Pratt, the captain of the school, works here, but probably Jeremiah Cochrane excels him in their trade; the latter has almost entire charge of the job work of the office, which is by no means small. The "Advocate," a weekly newspaper, is edited and printed here. The boys do all the mechanical work and sometimes they are permitted to do a little editing also.

Storekeeping.—Albert E. Kennedy, age seventeen, has been five years at the school and three years at this business. He is now with Wilcox & Ramsay, of Elkhorn. They speak most highly of him and value him as a reliable, intelligent lad.

Harnessmaking.—Charles A. McDonald, age fourteen, and Donald Brass, age fifteen, are learning this trade. The former has been at it three years, and he is now a good workman, his harness display at the Regina exhibition being an excellent one. Young Brass is only a beginner, having as yet been but six months in the school.

Blachsmithing.—Three boys are learning this trade with W. J. Taggart—Donald Gamoose, age nineteen, Duncan Shotclose, age eighteen, Josiah Anderson, age twenty. The first two named are Blood Indians and have been eighteen months in the school. The last named is a Cree, and has only been three months in the school. Mr. Taggart has words of praise for each one of these lads. He thinks that Anderson is a natural mechanic.

Tinsmithing.—Only one pupil is learning this trade, he is with James Ellerington, a master tinsmith in Elkhorn. Neil Yellow-wings, nineteen years old, is a Blood Indian. He has been eighteen months at the school. Mr. Ellerington gives him a good character, and says that he is intelligent and willing to learn the trade.

It will be seen from the foregoing remarks that the school conducts four trades, namely, printing, bootmaking, tailoring and carpentering. I am happy to inform the department that the three first named have, after paying every expense in connection with their business, shown a small margin of profit on the last year's business. While carpentering has improved over previous years, it has not as yet reached the same satisfactory position. Should a good harvest be secured in the immediate neighbourhood, it is expected that business will largely increase in these shops, and that they will become a source of revenue to be depended upon.

School Room.

The educational department has, for the past two years, been in the hands of Miss McCleary, a competent teacher both in address and proficiency, but she was too severely taxed with such a large number of pupils. Her successor will be assisted by Mr. Fletcher, a scholarship graduate of Owen's College, Manchester, and an undergraduate of Cavendish College, Cambridge. This young gentleman has been recently engaged as assistant teacher; he will also lead the boys in their games and recreations, coaching them in cricket, football, lacrosse, &c.

Although the school room has been much improved by the addition of a skylight, it is much too small; in fact the whole accommodation for the different departments of the school is badly congested as well as the school room; particularly that afforded in the dining room, the girls' dormitories and the laundry.

The children appeared in the school room clean and neatly dressed. They were examined in reading, spelling, arithmetic, geography, dictation, blackboard work, drawing maps from memory, composition, &c.

I visited all the departments, apartments and offices of the school. The dining rooms, kitchen, store rooms and laundry were scrupulously clean and orderly, so also were the dormitories. The beds were clean with white sheets and pillow cases for both boys and girls.

I attended at several meals. I found excellent food liberally supplied and well cooked.

The daily routine of work and duties is punctually adhered to, and the officials and employees are very attentive to their duties and take great interest in their work.

Conduct of the Pupils.

Having no private playground, the boys, during recess and recreation, are allowed to move freely round the town. I cannot but praise their general demeanour and conduct. It is exemplary. I am able to say this not only from personal observation, but it is the freely expressed opinion of the people of Elkhorn with whom I came in contact.

The school football eleven is allowed to be the champion club for the province west of Brandon. The boys of all sizes take the greatest interest in this game, and they not only play among themselves, but they are encouraged to play and mix freely with the white clubs of the town; their prowess at the game being admired and applauded. Next summer they expect to do something at cricket, Mr. Fletcher being able to coach them in that game also.

The girls are taught to do housework, cook, bake and laundry work, also to knit, sew, patch and darn. They are invariably well dressed, and individually as well as collectively appear to great advantage. They (the same with the boys) talk English exclusively when playing together, as it is the only language common to all.

Mr. and Mrs. Wilson have a staff of assistants and trade instructors who follow their lead, and who have their hearts in the work without exception. They are all young together and teach by example, industry, sobriety and Christian character

Oak River Sioux.

I next visited the Sioux Band of Indians at Oak River, in Agent Markle's district.

Although it was late in December and the weather was very cold, I found these Indians living comfortably—even then somewhat hard up as they had a short crop—but all of them were well dressed, with very comfortable domestic surroundings. They are entirely self-supporting, the resident farmer, Mr. Scott, being allowed little or no food for distribution among them. This has cultivated self reliance, and they manage very well.

Their herd of cattle is in a thriving condition; the area of the reserve and the supply of hay does not admit of its being allowed to increase much in numbers, but the improved breed of their cattle has increased their value, and every year they have some to sell, and in consequence they receive the highest prices going. Although their crops were affected by the drought and the yield was not great, they have been managed better than formerly, and the Indians derived more good from them than they did from some larger ones. The whisky traffic has been suppressed so that little of their substance goes in that direction now.

The day school was not in session while I was on the reserve. The new school house is a suitable and comfortable building, well supplied with school furniture and material.

There was no sickness on the reserve.

ST. BONIFACE INDUSTRIAL SCHOOL.

This school is conducted by the Grey Nuns, the Very Reverend Mother Superior of St. Boniface being the principal. It is divided into two departments. The boys and some of the larger girls are domiciled in the government buildings erected for the purpose. The remainder of the girls have sufficient accommodation supplied them in the convent and they are there trained and taught by a special staff of three ladies under the direct supervision of the reverend principal. Each department is conducted as a self-contained school.

My inspection was confined to the business part of it, auditing the account books, and inspecting the various industries in connection therewith.

Since it was opened in 1891, one hundred and eighty pupils have been enrolled. The demise of twenty-one of them has been reported and thirty-one boys and thirty girls have been discharged and four have absented themselves without leave.

Boys' Department.

The staff of this department is as follows:—

Rev. Mother Superior Hamel, principal.
Rev. Mother St. Theresa, matron.
Rev. Sister McDougall, assistant teacher.
Rev. Sister Deschambault, first teacher.
Rev. Sister Gascon, cook.
Rev. Sister Hudon, seamstress, etc.
Rev. Sister Girouard, do
Rev. Father Lavigne, principal boys' department.
Nancy Nebraska, assistant cook.
Marie Boehimaer, housemaid.
Annie Leslie, teacher.

Trades Instructors.

Norbert Clement, carpenter.
David Joyal, shoemaker.
Constant Paulus, farmer.
Alex. Gillain, blacksmith.
Herman Camille, farm assistant.

It appeared to me that great economy is exercised and that business talent is brought to bear in the purchasing of clothing and supplies, and in no other institution have I seen the pupils better and more appropriately dressed than here. The boys' suits for fatigue as well as for dress parade excel in texture and value any as yet furnished in government conducted schools. The same also may be said of the girls' best dresses.

The children presented the appearance of being well nurtured and cared for. Their dormitories are airy and very comfortable.

On 28th February, forty-six boys and fifteen girls were present in the boys' department with two absentees, and thirty-two girls were present in the girls' department and two absentees also: the total number then on the roll being ninety-seven.

Sewing Room.

This is a large and comfortable room. Much work goes on here. With the exception of the dress suits of the boys, all articles of clothing are made here, for the boys as well as for the girls, also all mending, darning etc.

Laundry.

This is a large extension from the kitchen. The second story of it is intended for a drying room: at present it is not used for that purpose.

Dormitories.

The boys' dormitory is a fine large room, nearly the full size of the building. There is space yet, without crowding, for fifteen more cots. The recently built lockers and cupboards for spare clothing and linen are a great convenience. The inside fire escapes (traps throughout the floor at each end of the room) are supposed to be quite adequate in case of fire.

The girls' dormitory is quite full of cots. Everything in both dormitories was in beautiful order, and the beds looked very clean and comfortable. All the pupils are provided with nightgowns.

Farm.

The farming here is on the system of gardening on a large scale, the most useful of all for "Wood Indians." It has been attended with great success. The pupils are also instructed in the care of stock.

The following table shows the product of 1894.

Beets and mangold wurzel, one hundred and twenty-three bushels.
Potatoes, four hundred and thirty-five bushels.
Pease, fifty-one bushels.
Carrots, twenty-three bushels.
Tomatoes, seventeen bushels.
Corn, (sweet) six bushels.
Parsnips, one hundred and eighty-nine bushels.
Barley, (black), five bushels.
Beans, four hundred and thirty-five pounds.
Cucumbers and pumpkins, three hundred and ninety pounds.
Cabbage, three hundred and twenty heads.
Cauliflower, eighteen heads.

From May to 1st December, two cows produced sixteen hundred and twenty-two quarts of milk, and sixteen hens produced during the same period two thousand and one eggs and forty chickens. The live stock consisted of six cows, two heifers, two work oxen, one horse and twenty-five poultry. The animals were all in such good order that I was surprised to hear that they had not been fed grain or mill feed. The cows were fed in addition to hay some turnips and mangolds.

All of the boys, as far as their strength will permit, do farm work and all go out hoeing and weeding in the season.

Carpentering.

This shop is of good size and well lighted, therefore a most comfortable shop to work in. Five boys are learning this trade. The foreman reports favourably of them all as being good boys and making progress in acquiring a knowledge of the business.

Blacksmithing.

Three boys are learning this trade. The instructor is a most skilful and ingenious mechanic. He is a Belgian.

Shoemaking.

Seven boys are learning the trade of shoemaking. I was shown specimens of their work, which were very creditable and proved their progress in learning it. I was informed that the school is likely to lose the instructor, David Joyal, as he is already afflicted with partial blindness. This shop is large and comfortable, well lighted and most suitable for the purpose. It is attached to the carpenter shop.

Government Buildings.

All of these buildings are in a good state of repair. Lumber is on the ground to build an addition to the stable.

The Rev. Mother St. Theresa placed before me all accounts of receipts and expenditure in connection with the school since it was opened in 1891. She is most methodical in her book-keeping, and every facility was afforded me in preparing a clear statement and balance sheets for the information of the department.

Girls' Department.

This is conducted in a portion of the convent, and although the children live within these walls, they are separate and distinct in all their ways of life. The staff engaged in teaching and caring for them is as follows:—

Rev. Mother Superior Hamel.....principal.
" Sister Clement.....first teacher.
" " Joyal.....second teacher.
" " Couloumbe.....assistant.

During my inspection the children assembled in their dining room. They were in their every-day dresses, made of a neat, brown material, wearing also brown holland pinafores trimmed with red braid. They all had on good boots and comfortable stockings. They range in age from six to sixteen, averaging about ten. With the exception of two, they are all in good health and appeared to be very happy.

These children are kept entirely to themselves, taking their meals in their own dining hall, sleeping in their own dormitories, playing in their own yard and sitting all together in church; and although they are under the same roof as the orphans, they are not allowed to associate with them.

Before being dismissed, the children sang a couple of songs in chorus, for my edification, being accompanied on the piano by one of the sisters.

The dining hall is of sufficient size, and very comfortably furnished; over it is a sitting room where any of the children, slightly indisposed, have the privilege of retiring and spending a quiet time.

The schoolroom is in an adjoining building; it is of sufficient size for the present number of pupils, and it contains eleven patent desks and seats, besides benches. On the walls are maps, blackboards, &c.

Over the schoolroom, on the floor above, is their dormitory. Each child has a bedette bed to herself. They are draped with white counterpanes and snowy pillow-shams, and appeared to be very comfortable. Between the long rows of beds are spread homemade carpets of bright colours of the children's own manufacture.

The sisters immediately in charge have sleeping apartments at one end of this dormitory, simply screened off; therefore they are under constant supervision, night as well as day. At the other end of the dormitory accommodation is afforded for making the toilet; there are clothes closets off this, containing the spare linen, all beautifully arranged.

From this is a clothing room, where I was shown the spare wardrobe of the children. Their Sunday dress is a scarlet and black plaid flannel—a very warm as well as very gay dress. Their best dress is a black alpaca with a red silk vest, and with this they wore red stockings and black slippers. Warm quilted petticoats

were shown to me, each girl having one, also a small bag with her name worked on it. These held their extra boots and slippers. In each were two, and some had three pairs—showing that they are well provided in this particular, as I had already noticed what good boots each had on.

For church and street parade each girl was provided with a heavy navy blue cloth ulster, with quilted lining and large cape, making a most becoming costume as well as very warm one. These fine warm clothes are particularly noticeable as they were made in the school and in greater part by the girls themselves.

I was shown other results of their handiwork in made up clothing, knitting, mending, patching, darning, patchwork quilts, hearthrugs, the carpet before mentioned as being in use in the dormitories, then many articles of fancy work, netting, tatting, crochet work, silk work, bead work, &c., &c. The girls are taught to do home work, cook, bake and be generally useful.

The accounts for expenditure in this department were placed before me by the Rev. Sister LeTellier in a most businesslike manner, and from these I prepared a statement for the department. I also prepared an inventory of all government property in both institutions.

St. Paul's Industrial School.

I made an exhaustive inspection of this school during the month of January last, and visited it again in April.

Mr. J. B. Ashby is the principal, and he has under him an active working staff.

I found it necessary to open up a new set of account books, taking up the work from the beginning of the fiscal year then current, journalizing and posting from the original invoices which I found there on file, and prepared balance sheets to 31st December. The system of bookkeeping that I introduced here will give the greatest satisfaction, being simple and accurate. While it differs from the double entry system, it is based upon it and also upon the lines defined by the department for the keeping of these accounts. Four account books only are necessary, namely: invoice book, journal, ledger and store ledger. The ledger is kept as a continuous balance sheet, and any day in five minutes the cost of each line of expense can be determined.

In securing the services of Mr. A. Hayll as clerk the department has made a good selection. He is capable, painstaking and industrious, and he is in strong sympathy with the work of advancing the condition of the Indian children.

I made careful inventories of all property in the institution, classifying it under its several headings.

School and Class Rooms.

Mr. Fleetwood H. Williams, first teacher, and Rev. Henry Cochrane, teacher of the junior classes, conduct this department.

At the time of my inspection there were 70 children in the institution—33 girls and 37 boys. They are graded into classes as follows: 15 in standard V; 13 in standard IV; 15 in standard III; 8 in standard II; 14 in standard I. Five boys are supposed to have graduated from the schoolroom, and work the whole of each day at their trades and no longer attend classes. When they left, four of them were in standard V, and one in standard IV.

I have much pleasure in expressing my very great satisfaction with the progress of the pupils in all branches of study. Mr. Williams is a very capable teacher and the children are not only acquiring a good, sound English education, but they are taught to show off what they do know to the best advantage: there is no occasion here to ask the children to "speak louder": they read, they recite and speak distinctly and with an intelligence that convinces the listeners that they understand the subjects upon which they may be engaged.

A pleasing and interesting feature is the hour spent in Sunday School every Sunday afternoon. It is made most interesting, and the boys and girls all look forward to it as a recreation. The chief charm to them is that the teaching is interspersed with singing familiar hymns in which all the children join most heartily.

Standing Orders.

These refer to the routine work of the school. I found them observed by the pupils and officials. There is a hearty and genial spirit pervading the institution. All the children went about their several fatigues with alacrity and good nature; nothing appeared to drag. They were cleanly washed and dressed upon their first appearance in the morning, and immediately the work of the day commenced each one proceeded to his appointed duty, cheerfully, and worked as though he liked it.

Carpenter Trade.

A. Winder, instructor. There are seven pupils learning this trade; excepting two, they are all young men. The instructor, as well as the principal, speaks most highly of them all. The small shop in which they have to work greatly curtails their chances of learning all branches of the trade, as it is not well lighted and it is very cold in winter, being difficult to heat.

Blacksmith Trade.

At the time of my inspection, there was no instructor for this trade. There are five pupils. The head boy, Joseph Kent, has charge of the shop, and he is doing some work. Some of these boys were also helping to do some plumbing in the main building. They are good, well intentioned boys and take an interest in their trade. They were filling an order for twelve dozen door-scrapers for J. H. Ashdown, of Winnipeg; but there were few orders for general jobbing work.

Shoe Shop.

There are three boys set down as shoemakers, one of whom, Isaiah Badger, is thought to be sufficiently advanced to teach others. On account of the laundry having been destroyed by fire some weeks before, the shoe shop had to be used as a laundry; therefore, there was a difficulty in finding them a proper place to work in. Probably that is overcome, long before the time of this writing.

Printing House.

Four boys are engaged in the printing house, the senior, Maurice Sanderson, being foreman in the morning and Arthur Cochrane in the afternoon. These boys are intelligent, and exhibit a fair knowledge of the business. They set up and print the monthly journal (Aurora) for January in a most creditable manner. They also perform any job work that offers. The two other boys are clever and take great interest in their business. They all attend classes, the seniors standing at the head of the school, and the other two boys being highly commended by the teacher for their progress.

Farm.

The farmer, Mr. Fraser, has nine pupils. During the past winter they were engaged every day hauling hay from the meadows, where it was stacked, and firewood from the railway station, carting manure on to the fields, and attending to the live stock.

The farming operations of last summer were not attended with much success. The land is cold and wet, and a wet rainy season drowns out the crops.

The Principal.

During my inspection I received prompt assistance from the principal. Whenever he was not engaged in supervising the work in the trades shops, on the farm and about the residence, he remained with me and assisted me in my work.

He is the first man in every department of the school, evincing a knowledge and an interest that is always to be expected from a man in his position.

Matron.

There were a great many ailing girls. The doctor said that their complaint was la grippe. This increased to such an extent that during the last week in January he had to visit the school daily. Mrs. Ashby proved a perfect mother to them, personally waiting upon them, night as well as day.

The boys escaped contagion. This was, I believe, owing to their hardier, rugged mode of life and their out-of-door games, playing football on the hard snow even by moonlight with the thermometer away below zero.

The gentle management of Mrs. Ashby does much to refine the characters of all, and the manly games of cricket and football introduced and practised by the principal have done much to take "the sneak" out of the boys.

Housekeeper.

Miss Applegarth is a most capable housekeeper, and the domestic affairs are performed with great regularity, with a quiet energy that is gratifying.

Instructress.

Miss Wright has a heavy duty in teaching the girls knitting, darning and mending; she also attends them in their walks and recreations. She is most industrious and appears to be much interested in her work.

Miss Slater and Mrs. Dixon, as cook and laundress respectively, give satisfaction in their positions. There were, as so often is the case, no mutinies between them and their pupil assistants; all moved smoothly and satisfactorily.

Seamstress.

This position was held by Mary Cochrane, an Indian girl, who received her training in this school. She is 23 years old. I observed her closely. She is a most deserving girl, a diligent worker, self-possessed, has an excellent manner with the younger girls, and is a good workwoman, having a good knowledge of dressmaking.

Dietary.

The "bill of fare" is plain. I believed it to be barely sufficient for the older pupils, who have now, at fifteen to eighteen years of age, larger apetites than they will have when older.

At my subsequent visit to the school, in April, I examined the accounts and account books, and found that Mr. Hayll was keeping them systematically and satisfactorily, and had them posted up to the end of March.

I inspected the barns and stables. I found that the cows (15) and the young cattle and oxen had greatly improved in condition since I was there in January, the oil cake and mill feed having produced these satisfactory results.

The children had mostly recovered from la grippe and were enjoying the bright sunshine of an early spring.

Swan River.

I commenced this inspection on the 9th April last. The department officials and employees are:—

W. E. Jones, Indian Agent.
F. Fischer, clerk and interpreter.
Wm. Thomas, labourer.

There are three bands: Coté, Keesickouse, Key. Annuity was paid in 1894 to six hundred and fifty-one souls, and as a curious coincidence this was exactly the number paid in 1889, therefore they may be said to be holding their own in population.

The missionary work is divided between the Roman Catholics, Presbyterians, and Church of England. The first named church has a day school and mission on Keesickouse Reserve. The Presbyterian Church has a boarding school and mission at Coté, and the Church of England has two day schools and two missions in connection with the Key Band: one on the reserve proper and the other on a fishing reserve of the same band on Lake Winnipegosis, distant from the agency one hundred and twenty-five miles.

	Religion.			
	Presbyterian.	Church of England.	Roman Catholics.	Pagans.
Key	.....	127	8	93
Keesickouse	17	10	50	68
Coté	155	1	15	107
Total	172	138	73	268

The missionaries resident in the agency are Rev. Father de Corby, residence and church, Keesickouse; Rev. C. W. Whyte, Presbyterian, residence and church, Coté; E. H. Dee, school teacher and missionary, residence and church, Key; E. H. Bassing, school teacher and missionary, residence and mission, Shoal River, Key Band; Rev. T. A. Teitilbaum, Church of England, visits Keys' Reserve once every month and holds service.

Schools.

The attendance of the children at the different schools in this agency is as follows:—

Key Day School (reserve)	12
" (Shoal River)	27
Keesickouse Day School	12
Coté Boarding School	29
Regina Industrial School	42
Elkhorn "	10
Qu'Appelle "	4
Total	136

The numbers of children appearing on the annuity pay sheets are:—

——	Boys.	Girls.	Total.
Coté	64	66	130
Key	50	61	111
Keesickouse	26	29	55
Total	140	156	296

I will take up the subjects of the Key day school and the Coté boarding school later on in this report. Regarding the Keesickouse day school, I will say *en passant*, that I visited it on 23rd April. The teacher is a French (old France) gentleman named G. Vendome, of good education. There were four boys and four girls present and twelve pupils on the register. The children were clean and cleanly dressed. The school room was in good order and the school building is in good repair. The present teacher re-opened the school 24th November, 1894. None of the children enrolled have ever been at school before the present teacher assumed charge.

Shoal River day school, teacher Mr. E. H. Bassing, age 32 and unmarried. He is an Englishman of good education. This school is situate on the Key fishing reserve near the mouth of Shoal River on Lake Winnipegosis and one hundred and twenty-five miles from the agency, over very bad roads.

On 31st March there were eighteen boys' and nine girls' names on the register with an average attendance of twenty-one. Six children were transferred from this school to the Elkhorn Industrial in November last. The school is under the auspices of the Church of England, Diocese of Rupert's Land. The teacher is licensed by His Grace the Archbishop as a lay reader, and he conducts church services with regularity. I am informed that he expects to be ordained shortly. The agent places great confidence in him and makes use of him to dispense the department's medicines to the Indians, also as supervisor of the Indians' industrial pursuits. He acts as friend and adviser to the Indians and they express trust in him as such. He reports monthly to the agent regarding their condition.

A new school house is in course of erection; $300 having been granted by the department for this purpose. Mr. Bassing's report upon this, dated 1st April, is: "all the lumber is cut and drawn in, the logs are being put up and we expect to finish it this week."

It was early in the spring of 1880 that I paid my first visit of inspection to the Indian reserves which now form this agency. I have made many visits to them since then, but my mind always reverts to that first one. Then, the only Indian farming was out at the Crowstand Indian village, which consisted of a cluster of small houses and huts under old Chief Coté. Six acres formed all their farm then, where the grain and potatoes combated with the weeds for existence; as the Indians then thought that they had done all that was required of them when they had planted their crop until it required their attention at harvest time.

That village and field has long since been abandoned. The Indians then living there—if now alive—have removed and built new houses and byres along the river; taking up locations at some distance from each other, near to hay and water. Indians who were then hunters have since come in and settled in similar locations.

Those Indians forming the other two bands were mostly living then (1880) at Swan River, some fifty miles east of this.

Coté Band.

To deal first of all with those that are farmers in the full acceptation of that term: there are seventeen with complete homesteads, from an Indian Department standpoint. I visited all of these; they are in different parts of the reserve, con-

venient to both hay and water, the great essentials. Their names are as follows:—Alex. Caldwell, Jack Friday, Alex. Coté, Bill Fiddler, Peter Fiddler, Chief Coté, Iron Quill, Baldhead, Thos. Shinguish, McKay Shinguish, Widow Favel, Kakawezans, Whitehawk, John Seivewright. These men own seventeen good dwellings, eight of them being quite new, thirty-seven stables, thirty work oxen, one hundred and eighty-five domestic cattle, forty-four breeding sheep, thirty-eight spring lambs, forty-eight cocks and hens, forty-six horses, fourteen lumber wagons, two mowers, two horse-rakes, &c., &c.,

They will plant and sow forty-six acres of land this spring,

The stables are fitted up with stanchions and are otherwise fairly comfortable. All the women of the band are able to milk, and do as much as they are allowed to. Six make butter; but both milking and making butter has to be restricted within reasonable bounds, or the calves would be made to suffer. The poultry are in the hands of five families and the sheep in the hands of three.

In addition to the above named farmers, John Black and Donald McVicar have each built a new house, and twenty-one other Indians own cattle and horses.

Kakawegans, named above, is a hunting Indian, and deserves special mention as a man who has taken up the new life of a farmer quite recently (still adhering to the hunt in season). He owns twelve head of excellent cattle, very well bred. He sows some barley and plants some potatoes. He has a good house, two stables and a storehouse. He has a fine lot of spruce timber and lumber logs lying at his door which he took out last winter for a new house.

Chief Coté showed me very nice white loaf bread made by his daughter-in-law, *née* Harriet Favel, an ex-pupil of Crowstand school.

Preparations have been made by Chief Coté to burn a kiln of lime; he has most of the stone hauled to the kiln, and a large quantity of wood.

The extension of the reserve, taking in hay lands on the west side of the Assiniboine River, has been highly appreciated, and has proved to be a great boon when the old meadows failed to yield sufficient hay for the increasing herds.

White Hawk and his sons are at present engaged in building a new house and stables, byres, &c., across the river, near the hay land. They will have about thirty-five head of cattle to winter, and Chief Coté and Solomon Manitoose have built a house and byres across the river in those hay fields.

Keesickouse Reserve, No. 66.

Several Indians of this reserve have model homesteads, namely: Kitchemonia, Quewezance, Widow Contois, Widow McLeod, Chief Keesickouse, Kishano and sons, and Kakakeway and son. These people own ten dwelling houses, twenty stables, eighteen work oxen, one hundred and three cows and young cattle, twenty-four horses, five farm wagons, three mowers, two horse rakes, thirty-two fowls. They intend to sow and plant twenty-five acres of grain and potatoes.

Kishano and sons have a saw pit, and were whip-sawing lumber when I was at their place. They sold some lumber to the agent, also rye, barley and oats. They have eighty bushels of potatoes on hand, having harvested one hundred and fifty bushels.

These two men are rather remarkable, as they are strictly speaking hunters. There are no better bred nor finer cattle on this reserve than theirs. They are in fine condition. They have charge of a thoroughbred bull, and it has been well taken care of. They had a surplus of hay and were permitted to sell some.

Kitchemonia dug a well down twenty-seven feet and bored twelve feet further, but he did not succeed in striking water. His buildings are not over a quarter of a mile from the river, but that is a little too far to drive cattle to water in cold and stormy weather if it can be avoided.

This man and Quewezance are the principal breeders of the Polled Angus cattle. They are very fine animals, and the cross-bred grow much larger than the thoroughbred.

Widow McLeod has built a very fine new house, costing her some six hundred dollars. This is the last of a comfortable competency (eight thousand dollars) left her by her father, the late Angus McBeth, of the Hudson Bay Company, a few years ago. She, from this out, will be not much better off than the other Indians.

Old Chief Keesickouse is in good health, but every year he becomes less able to farm for himself. An old wife is all the family that he has left.

Three new houses including Mrs. McLeod's were built during the past year. The other two were built by Straightnose and Mamaqua.

The sheep—twenty-six and spring lambs—are in the hands of Kitchemonia, Quewezance and Widow Stevenson.

Key Band.

Six Indians of this band are farmers, namely: William Brass, George Brass, Thomas Brass, John Redlake William Brass, Jr., Chief Key and his two brothers. Very few, if any, of the halfbreeds of this country have as good home surroundings as the first five men named. Their houses are excellent buildings, are partitioned and have also sleeping apartments upstairs.

The farmers of this band occupy eleven houses and fifteen stables. They have ten work oxen, one hundred and eighteen cows and young cattle, twenty-two horses, seventy fowls, five farm wagons, two mowers, two horse rakes and have already ten acres in grain sown.

Wm. Brass, Sr's. family are great butter makers and raise turkeys as well as other poultry. This band has also the use, on loan, in addition to the above mentioned private property, of two mowers, two horse rakes and two farm wagons. For Indians they have not many horses, but those they have are of superior breed.

The large portion of this band who live at Shoal Lake are reported as a very good lot of Indians. They number nearly one hundred and sixty souls. Last year they raised sufficient potatoes for use and seed, and one man this spring had eighty bushels to sell. Their principal subsistence is from fishing and hunting.

The crops grown by the Indians of this agency in 1894 aggregated eighty-three and a half acres, the yield of which is set down as follows:—

——	Coté.	Key.	Kee-sickouse.	Total.
Wheat.....Bush.	15	25	0	40
Oats..... "	90	60	20	170
Barley..... "	205	65	206	476
Potatoes..... "	560	212	355	1,127
Carrots..... "	48	14	19	81
Turnips..... "	90	25	95	210
Total.....	1,008	401	695	2,104
Hay.....Tons.	1,063	440	519	2,022

Summary.

Among these bands, they now own as private property—which means that they were acquired outside of direct government aid—twenty-four farm wagons, seven mowers, seven horse rakes; a great number of bob sleighs (homemade) are seen at every house, also hay racks, whiffletrees, hay forks, axes, &c. They are becoming careful of their own personal property, which is a sure sign of advancement and civilization.

Many women make both hard and soft soap from wood ashes and grease (the latter is supplied by the department). Almost without exception the women knit socks, stockings, mitts and comforters, etc.

Live Stock.

I rounded up the cattle at the different Indian farms, and I assured myself of the reasonable correctness of the live stock registers, from which the quarterly returns are made up.

The animals are in good condition, better than I have ever seen them so early in the spring in this part of the country.

There are already a good number of spring calves. The spring being so favourable, I thought it a pity there were not more. At every farm there was hay on hand and to spare. The stables were in good repair, and there were a few young bulls which had not been castrated last fall, but while I was there the oversight was being rectified.

In looking over the cattle registers and returns, I gathered a few facts which may not be devoid of interest to the department.

On 31st December, 1888, the Indians of this agency had two hundred and thirty-eight head of cattle. On 31st March, 1895, they had six hundred and eighty-two head.

During the above named period the following were the changes, as nearly as I can make out:—

Dec. 31, 1888.	On hand	238	Casualties, Dec. 31st, 1888, to March 31st, 1895	150
	Increase to March 31st, 1895	832	Killed and sold for beef during same period	238
			March 31st, 1895, on hand	682
		1070		1070

The six hundred and eighty-two on hand 31st March, 1895, are made up as follows:—

——	Coté.	Key.	Kee-sickouse.	Total.
Oxen	61	17	39	117
Bulls	5	3	5	13
Cows	148	83	68	299
Steers	77	34	28	139
Heifers	44	38	32	114
	335	175	172	682
Sheep	49	.....	34	83
Horses	59	28	30	117

The Shoal River portion of the Key Band own forty-eight of the one hundred and seventy-five head, namely, four oxen, twenty cows, thirteen steers, eleven heifers.

Spring calves have not as yet been enumerated.

All the thirteen bulls are thoroughbred. Out of this six hundred and eighty-two head of cattle on hand 31st March last, the agent has recommended for sale and slaughter, during the coming year, one hundred and ten head. Of these, twenty-nine are choice shipping steers and eighty-one are old oxen, barren cows, etc. As there are two hundred and ninety-nine two-year-old heifers and cows, it is expected that the calf crop for this year will far exceed the number to be disposed of.

The sheep have barely held their own. There are now eighty-three on hand, and eighty-four were purchased, namely, twenty-three in September, 1892, and sixty-one in November, 1894. There was bad luck with the lambs the first two years. There is every evidence at present that this year will prove to be a fortunate one.

I feel warranted in stating that every stable is fitted with stanchions and that every animal is legibly branded "ID." I say this from the fact that of all the stables I entered, I found them fitted up as stated, and I do not recall observing one animal without the brand. I attribute this favourable state of affairs to the indefatigable persistence of the agent, who never allows an Indian to rest in peace until a thing is done that has to be done; and as they are becoming forehanded in their work, they appear to be satisfied and contented with their situation, and the agent himself says that in all his efforts to help the Indians he has been most ably and cheerfully assisted by Mr. Fischer. I am aware that the latter personally branded all the cattle, of course receiving the assistance of each man owning them.

Industrial Operations at the Agency.

The agency supplies itself, without any assistance or expense to the department, with hay, oats, roots, potatoes, garden vegetables and fuel. There is about twelve acres of land under cultivation, which is fenced and cropped in a manner to set a good example to the Indians. With the team, the boy employed has, in addition to ploughing the above, ploughed and prepared land for the crops of the following widows: Mrs. Pelly, Mrs. Contois, Mrs. Stevenson and Mrs. Bird. He also cuts hay for these same old women, also cuts and hauls that required for the agency.

There are kept at the agency four thoroughbred cows. This is done so that their calves may be carefully raised for stock breeding.

The agent has a good garden, where he raises all the smaller vegetables, and he is very liberal with them, giving the Indians large quantities, with the hope that in cultivating a taste for eating them they may wish to grow them too. His housekeeper raises turkeys and fowls, makes butter, cheese and soap, and takes every opportunity of teaching the Indian women to do the same. He has met with great success in breeding and raising goats, and will probably turn them to some profitable purpose. They are supposed to protect the sheep from wolves, but they prefer to herd with the cattle.

The agency buildings are kept neatly and in good repair. They are a credit to the department as well as to the agency; they consist of agent's house, solid concrete; office, large, one and a half story, roughcast; clerk's house, a frame cottage of good size; a large store house built of logs; blacksmith and carpenter shop; implement shed; log stables and ice house.

I took stock of the goods in the agency warehouse and also of the goods in use. I checked the same with the books and found the quantities shown to be on hand correct.

The following books are kept in the office: order book, ledger of receipts and issues, cattle registers (3), one for each band, receipts of all goods, cash book, register vouchers, authority to purchase, letters received, register of births and deaths, cattle sales book, earnings of Indians, Indian passes, permits to sell, issues to individual Indians of implements, permits to sell or kill cattle, doctor's prescriptions and medical register, letter book. Work, live stock, agency store and implement returns, ration sheets, quadruplicate vouchers, waybills, letters and circulars are all properly filed, also copies of quarterly school returns. The office is exceedingly comfortable and large. It is fitted up with counter, desks, two tables and has a business-like appearance. I found the books well kept, written up to date and all of the office work performed in a creditable manner.

Earnings of Indians.

From 1st July, 1894, to 31st March, 1895, these Indians sold cattle and beef amounting to $922.08, and they earned by freighting and labour $543.11, making a total of $1,465.19.

With this money they purchased two hundred and fifty-two sacks of flour, some furniture, provisions, clothing, all under the direction and supervision of the

agent. The skins, pelts and hides sold are not included in the above earnings: for the fiscal year ended 30th June, 1894, these were estimated to amount to $8,000.

Key Day School.

The teacher is Mr. Ernest Harold Dee, a licensed lay reader and missionary of the Church of England. He has been in charge here for four years. His sister takes the school twice each week for industrial teaching such as sewing and knitting. There were specimens of the children's handiwork: patchwork quilts, knitted cuffs, comforters, jackets, socks and stockings. The boys knit as well as the girls and are quite proud to show it.

The schoolhouse is built of logs, with a thatched roof, and has a large porch and store room for biscuits. It is heated by both a fireplace and a stove. The building is old and is not worth much expense in the way of repairs.

There are twelve children on the school register, nine girls and three boys, but on the day of my inspection but nine of them were present. The three children absent were away with their parents hunting. Four children were drafted from this school to the Elkhorn Industrial about six months previous to my visit.

They are graded as follows:—three in standard III, two in standard II, three in standard I*b* and four in standard I*a*. Although a small school it is all alive. The children are alert and bright. They read distinctly and well. Standard III evinced a good knowledge of geography as relates to Canada, of grammar as far as nouns, of arithmetic as far as long division, of dictation from the third reader. Those in the other standards showed intelligence and progress.

The pupils were well and cleanly dressed, particularly so. They are commended for their punctuality in attendance and for obedience. The schoolhouse was clean and in good order.

CROWSTAND BOARDING SCHOOL.

This school is conducted, under the auspices of the Presbyterian Church, by the Rev. C. W. Whyte, as principal, and an efficient staff.

At the time of my inspection in April last there were thirty-five treaty children and six non-treaty on the school register, twenty-nine of the former being present, and it is with them that I will deal in this report.

These pupils are graded as follows:—

Two in standard III, four in standard II, seven in standard I*b*, ten in standard I*a*, six in the kindergarten class. My examination covered their whole work. Standards III and II were examined in reading, spelling, dictation, composition, arithmetic to long division, tables to twelve times, geography, map of Assiniboia and general questions, history, discovery of America, Indian tribes, British flag, Union Jack, &c.

Standards I*b* and I*a* were examined in reading, spelling, dictation, arithmetic, addition and multiplication up to ten; composition. Kindergarten or infants' class were exercised in sounds, counting, &c., and in the evening they were amused and instructed in sewing figures upon cardboard.

I omitted to mention that the older children had constructed out of clay a map of Assiniboia. The principal and the teacher are very anxious to be furnished with a full kindergarten outfit.

After school hours, between four and five o'clock, under the direction of the seamstress, nine girls and eleven boys were engaged at straw plaiting, the straw used was the best obtainable, but it was discoloured and coarse.

The time table of the class room is built upon the curriculum laid down by the department. It is adhered to strictly.

The hours for devotions are immediately after breakfast and immediately after ten, all the staff and children being present, a hymn is sung, then reading of scriptures and prayers. At evening service all the children who can read, read verse about. This they did clearly and distinctly.

A clothing book is kept and a separate account is opened for each pupil in which entries are made as clothing is issued to them.

Supply of Water.

As yet there is no well. Boring for spring water was tried last summer, but they were unsuccessful in getting any fit to drink. A supply of ice has been placed in a shed to provide drinking water until the river becomes purified by the spring freshets; then river water will be used as in former years. The ice house has been filled for summer use.

I was present at the meals. The food was liberally supplied, well cooked and well served. The children have the appearance of being well nourished, and they were comfortably and cleanly clothed. They are bathed regularly once a week, and oftener if occasion requires. The arrangements for ordinary ablutions and toilet are conveniently placed. I observed that the teacher, Miss Henderson, attended personally to the little boys, a most necessary matter, as children of five years old require the constant supervision of a woman.

I find that the new rule—since my last inspection—compelling the parents to obtain the sanction of the agent before being able to take their children home for a day or two or over a Sunday, works well; at any rate the Indians make no objection to it, and the applications for this favour are becoming fewer as time goes on. My observation leads me to think that the Indians are well satisfied with the school, and it would be easy enough to increase the attendance if it were thought advisable to do so. It is evident that they take the greatest interest in it, and watch every movement as jealously as if it were their own household.

Buildings.

The main building contains the principal's quarters, bed room of the teacher, staff dining room and pupils' dining hall; the latter is suitable, and it is also used as a recreation room in the evenings. Devotions are held there, singing classes, etc., the organ being there.

An extension of this building contains (first floor) kitchen, store room, pantries, laundry, bath room; and on the second floor, the girl's dormitory. This latter room is suitable as regards size, but it is too near to the roof to be comfortable in either summer or winter. The beds were clean with white sheets and pillow cases and each girl had a night-gown hanging at the head of her bed.

The new building contains the large school room. Across the hall is a class room, a sewing room and a play room in winter, also the seamstress' room, in which is the sewing machine. The furnace is at the back part of the hall, as there is no basement to this building, not even a cellar.

On the second floor is the dispensary where medicines are kept, clothing room lined with shelves, sick room; as there were no sick at the time of my inspection, it was being used as a class room for the kindergarten. The upper flat is the boys' dormitory, the full size of the building. It contains ten double beds, affording accommodation for twenty boys. The beds contained sufficient clothing and had on sheets and pillow cases.

I found the buildings throughout were cleanly scrubbed and in an orderly condition, and reflected credit upon the management. An inspection of the outbuildings and sheds showed them to be kept clean and in order.

The number of animals kept in connection with the school consists of four horses, twenty-two cattle and twenty sheep.

Gardening was being proceeded with; some seeds were already sown, also attention has been paid to planting trees and laying out flower beds in the front. This, apart from its indication of neatness and order, will tend to cultivate the taste of the children and of their parents when visiting the school, and perhaps impel them to attempt something similar at their own homes.

The *esprit de corps* of the staff appeared to be good, Mr. and Mrs. Whyte and Miss Henderson (teacher) being particularly enthusiastic in their work. The latter showed in the practice of her calling that she has a true regard for her pupils beyond what is expected officially and without which the most learned teacher becomes a failure. I cannot close this subject without connecting the agent's name with the success which has attended this school. The deep interest and personal supervision which he has given to it has tended to greatly strengthen the principal's hands with the parents, and his long time experience in dealing with Indians has helped over many a difficulty which otherwise might have brought about disagreeable conclusions.

BIRTLE BOARDING SCHOOL.

I inspected this school on 29th and 30th April.

Staff.

Neil Gilmour, principal and teacher.
Miss McLaren, matron.
Miss McLeod, assistant matron.
Nellie Spencer, cook.
H. J. Martin, servant.

I was accompanied in my inspection by Indian Agent Markle. We held a most interesting examination. The older children only attended classes alternately, mornings and afternoons. When not in the class rooms they are engaged in industrial pursuits: the girls in the kitchen, sewing room, laundry, dairy, or in other household duties, and the boys at gardening, etc.

Of the thirty children on the school register only twenty-five are officially enrolled, namely—twelve boys and thirteen girls. Of these only twenty-four attended the examination. The absentee was Hugh McKay. He is a printer and was busy at his business. The five children (four boys and one girl) not officially enrolled are treaty children and they receive just the same attention as the others do.

I was much pleased with the good order and discipline observed in the school room and with the interest the children took in their lessons. The room is properly furnished with desks, blackboards and teacher's desk. It is well heated by a furnace and well ventilated.

Mr. Gilmour holds a second-class Ontario Normal School certificate, also a teacher's certificate for the Territories. He is a single man aged twenty-eight. He takes all the classes. He is a kind and patient teacher and the discipline in the school room was well maintained without harshness.

Class Room.

The children are graded as follows:—

Seven in Standard IV, three in Standard III, two in Standard II, five in Standard I*c*, seven in Standard I*b*, six in Standard I*a*.

While all the children have made satisfactory progress since my last inspection, not one of them has advanced equal to Willie Oliver, No. 80, admitted at six, at which time I met him, then not understanding a word of English, parents ignorant hunters. He is now eight years old and in Standard III, and remarkable for his ability, aptitude and brightness. One child, 064, Martha Thunder, was drafted to the Regina Industrial School.

Standard I*a* were examined in reading, counting, days of the week, making letters and figures on slates. Standards I*b* and I*c* the same, only more advanced, and arithmetic to division, also spelling. Standard II in reading, spelling, arithmetic, tables, dictation, composition, writing in copy books, also in all the work of the lower standards. Standard III in reading, spelling, dictation, composition,

arithmetic to long division, tables, examples in arithmetic on the blackboard, elementary geography, religious instruction, writing in copy books. Standard IV, all as in Standard III, but more advanced, also in grammar, natural history, physical geography.

I observed that the teacher was working up to his time table. English is spoken so freely and generally that one forgets it is not their mother tongue. The school was opened with prayer and closed with singing and prayer. The routine duty of the school is followed according to a system which is worked up with regularity.

I was present at the pupils' dinner. It was served in their dining room. The table was appropriately laid with table cloth, knives, forks, spoons, plates, cups etc., and each child had sufficient of bread, meat, potatoes and pudding. The matron was present and presided and saw that all had sufficient. The children were clean in their persons and comfortably and decently clothed.

I made a thorough inspection of the different departments of the school, also of all the apartments. All were clean and in the best of order and represented good house keeping. The girls are provided with night gowns, but the boys are not. This latter omission will be rectified forthwith. A few of the boys have to occupy double beds, but this will be changed as soon as more single iron bedsteads can be purchased. The beds were comfortable and clean. There is plenty of room in the building and to spare, so far as dormitory accommodation goes.

The sewing room and work room is full of interest. I was there shown much work on hand and finished—garments, dresses, knitting, darning, patching and rag mats. Although a great deal of the clothing is received made up; there is much of it that requires alteration to be made to fit, and it keeps all busy who are old enough to work at it.

A log building 12x18 feet, 8 feet walls, was being built for a dairy. It was planned and designed by the Indian agent as a model for Indians to follow, therefore it is built of logs with a sod roof purposely, so that they can copy it exactly. The sod roof will make it as cool as a cellar. When it is in good working order, it is his intention to invite those Indians who have already been making butter to come and see it and return home and build one like it.

The barn is a fine one of modern design. The accommodation for cows and horses is very good; and the hay and fodder sufficient to last months can be placed under the same roof, making feeding them in winter not at all a disagreeable task as it often is, also under the same roof is the carriage house. There is adjoining, with a covered way, a large root house built of stone. There is a separate stable for the horses of Indians who come from a distance to visit their children.

The land belonging to the school is thirty acres; three and a half only are cultivated,—entirely with vegetables.

Battleford Agency.

I arrived at Battleford on 10th May and remained several weeks in that agency attending to Indian affairs generally.

I visited all the Indian reserves, also the industrial school and day schools.

The Indians have fine herds of cattle. Great pains have been taken in furnishing them with the best of thoroughbred bulls, consequently their cattle are remarkably fine animals, almost without exception. Grain was not sown to any great extent this year and the Indians' attention was almost entirely devoted to growing roots, potatoes being the great staple, a large area having been planted with them.

Throughout the agency I found the Indians industrious and helping themselves to a living. They were teaming to the town their surplus hay, and many of them were engaged in hauling firewood, some to the industrial school and others wherever they could make a sale. They were all very anxious to make money in this way. Last fall they sold some thousands of dollars worth of beef cattle. This money was generally spent in purchasing farm wagons, mowers and rakes, for they appear alive to the fact that they must possess these in order to make money out of the cattle industry.

CARPENTER'S SHOP, BATTLEFORD INDIAN INDUSTRIAL SCHOOL,

SHOWING INSTRUCTOR AND INDIAN BOYS

Indians can be very successful raising beef, but not in working a dairy in connection therewith; for, if they milk their cows to any great extent, they starve the calves, as they neither understand nor will practise hand feeding them.

I observed that a feeling of self-reliance is growing up among these Indians. They make and carry out plans for the improvement of their condition, and they are developing an ambition to live in a better way, with more domestic comforts around them. I heard of no acts of insobriety or crime, and probably there is no community in the world of such poor people living such a blameless life.

I was much pleased with all the Indian farmers' houses, stables and outbuildings and the manner in which they have been kept up. Farmers Bourke, Finlayson and Willson have particularly fine, well cultivated vegetable gardens. These set a good example to the Indians, who will, no doubt, directly profit by them also, by receiving a good share of the product.

Repeated prairie fires have nearly denuded this beautiful country of timber, and the Indian reserves have suffered in the common lot. The Eagle Hills are scarcely recognizable to one who knew them well in days gone by, on account of the disappearance of the timber.

I visited three Indian day schools while in their neighbourhood. That on Little Pine's Reserve is taught by Mr. Lindsay. On the day of my visit, there were thirteen children present—nine boys and four girls. I found this school in a very satisfactory condition. The children were well washed and cleanly dressed, and in a short examination showed very reasonable progress had been made and remarkable intelligence developed.

The school on Poundmaker's Reserve is taught by Mr. Guthrie. There were eleven children present. All of them were neat and clean in their persons. Mary Red Lake, a pupil of this school, is a prodigy in figures and mathematical problems. Her attainments in this particular line are phenomenal.

I visited the day school on Red Pheasant's Reserve. It is taught by Miss Wilson. Thirteen children were present. They were bright and well washed, and were neatly and cleanly dressed. These children answered the questions put to them in distinct and audible voices, and showed much intelligence and good progress for their years and opportunities. The school room was particularly noticeable for the good arrangement of its furniture, display of maps, texts, etc., and the whiteness of its floor. The good behaviour and politeness of these children showed that much attention has been given in this direction also.

Battleford Industrial School.

I visited this school for the purpose of inspection upon several occasions. Mr. E. Matheson has lately accepted the principalship under the auspices of the Diocese of Saskatchewan and Calgary. He has a full staff of assistants, and work in the several departments is being proceeded with with vigour.

This school is situated in the geographical centre of a large Indian population, who require its teaching, and it should influence a large attendance, not only from the surrounding reserves, but also from the Onion Lake District. It should always be so full that as quickly as one pupil is able to leave from the top its place should immediately be filled by another taken in at the bottom. The fine buildings erected are a monument of a generous government, and its perfect equipment throughout for the work required should insure its success under its new management.

An intimate association with Agent Williams for some weeks impressed me with his sincerity in his work, and that his long experience in active service among the Indians has strengthened his interest in their welfare and progress. He has an intelligent grasp of their condition individually, and he is indefatigable in his exertions to promote their temporal welfare.

I have the honour to be, sir,
Your obedient servant,

T. P. WADSWORTH,
Chief Inspector Indian Agencies and Reserves for Manitoba and the North-west Territories.

ELKHORN, MAN., 31st July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—In presenting the sixth annual report of the Washakada Indian Home, I do so at midsummer, instead of at the beginning of the year, so as to make our financial year agree with the government fiscal year. The supporters and friends of the Home will doubtless be gratified to learn that good progress has been made. Although there are not a great number of "events" to record, there has been a steady increase and improvement in the work. In January, 1894, Mr. James Wilson, the Indian Agent from the Blood Reserve, paid us a visit, bringing with him eight boys. It was most opportune his arriving at this time, for while he was with us, Pata, one of the boys from his reserve who had come some time before, was taken ill with pneumonia, and after an illness of four days, died. At his own request, he was baptized the day before his death, showing thereby that he had fully accepted our faith, and the consolation and peace which it always brings. It was again under similar circumstances that Allan Pukski proved such a comfort to us, proving so clearly what a benefit true Christianity is to all. Apparently influenced by the example of their comrade Pata, whose death was still fresh in their minds, nineteen boys voluntarily were baptized. They wished to become Christians, seeming to realize that some outward sign was necessary. In June three chiefs of the Blackfoot nation came to see the Home, bringing with them two boys and one girl; this being the first Blackfoot girl to enter our Home. She is of the "Blood Royal," and a decidedly different type from any of the other girls in the Home, they all belonging to the more eastern nations. In the fall of 1894, Mr. W. E. Jones, Indian Agent of the Swan River Agency, visited the Home, bringing with him three girls and seven boys. Six of these children came from far distant Lake Winnipegosis. Mr. Jones is deeply interested in all that concerns the Indian race, and is most desirous that the children from his agency should be well educated and trained in the different branches of industrial work and brought up with Christian principles. By the appearance of the children one would judge that their parents are thirfty and industrious people.

We had the pleasure of entertaining the Hon. T. Mayne Daly, Minister of the Interior and Superintendent General of Indian Affairs. The evening he spent with us, we had an entertainment in the dining hall, in which the children and all the members of the staff took part. Mr. Daly expressed himself as being much pleased with the bright and happy appearance of the children and progress of our work.

Another visitor was Mr. W. W. McDonald, M.P. for East Assiniboia, and Mrs. McDonald. He was very much surprised to find the pupils so bright and intelligent, as the general impression is that Indian children are stupid, but such is not the case; any person having any experience with them knows better, the following being one illustration: early in December a rink of Indian curlers was organized; they very soon learned the game, and became very expert, winning a number of local matches and also a gold medal in the single competition. We received a very cordial invitation to attend the Winnipeg Bonspiel, and had the honour of winning a reputation for the boys as splendid curlers, and also as being the first rink of Indian curlers on record. Allan Pukski, who was a member of the rink, instead of returning, entered the Winnipeg General Hospital for the purpose of undergoing an operation for enlarged glands of the neck. After being in the hospital for four months, he succumbed after the third operation. He was fully aware of the great risk he was running, but preferred doing so to remaining in the condition he was in, as he felt that it was his only chance of regaining his health. His last Sunday before entering the hospital, he attended both services in Holy Trinity Church, Winnipeg, and remained with me to partake of the Holy Communion in the evening. I am confident he felt that this was his last service on earth. Such was the close of a noble life. One of the saddest duties I ever had to perform was breaking the news of his death to the Blackfoot and Blood boys, his former companions at the Home. It came as a great sorrow to them, for they had learnt to love and to look up to him as an elder brother and adviser.

To turn to the practical work of our Home, it may be interesting to our readers to describe a day's work. The large bell in the belfry of the central building at 6 a.m. tolls out the "rouse." In summer this is not an early hour in this country, where day breaks about two o'clock, for already the sun is some hours high; but in the short days of winter it is like being awakened in the middle of the night, for it is yet an hour or two before daybreak. But there is no delay; in a few minutes all is bustle and life; ablutions, dressing and preparing for roll call at 6.30 in the school room and for breakfast at 7, which is already on the table. At 8 the big bell sounds again; this time for prayers in the school room and general roll call, after which all disperse to their different avocations and allotments of work—the trade boys to their different shops, the smaller boys to making beds, sweeping and cleaning in the boys' department, carrying coal and wood, etc., etc.; the girls to their different household duties in the girls' department, dormitories, and in the kitchen, sewing rooms, etc.

It must be understood that half the children attend school each morning and the other half each afternoon (Saturdays excepted), therefore at nine o'clock, those for school appear there, neatly dressed. At 12 the big bell rings for dinner. At 12.10 it is served; at 1 the bell sounds again for work, all whose turn it is repairing to the work shops—while the dining room and kitchen girls attend to the necessary work there. At 1.30 school for those who have not been there in the forenoon. At 4.30 school is out, and at 5 all boys leave the trade shops. After washing and making the necessary change of clothes, they form up, boys and girls each in their own ground, and at 5.30 march in to tea. At 7 the big bell is rung for prayers and roll call in the school room. Then the boys and girls each return to their own building and play ground, having what recreation they can before bed time, which for the juniors is 8.30, mediums 9.30 and for the seniors 10. At 10.15 lights must be out. On Wednesday afternoons there is a slight deviation from the above, as there is a regular weekly inspection of the whole institution by the principal and staff at 4.30, when every department is visited, the pupils standing, each one at the foot of his or her bed, properly dressed for this searching ordeal. At 5 on Wednesday the band practices until tea time. On Sundays the rouse is at 6.30; roll call at 7; breakfast at 7.30; prayers at 8.30; church at 11; dinner at 12.30; Sunday school at 3; supper at 5.30; prayers and roll call at 7; church at 7.30.

GIRLS' DEPARTMENT.

At present we have enrolled twenty-five girls, who range in ages between four and seventeen years. They are taught all branches of household duties, such as cooking, laundry and house work, sewing, mending, patching, knitting stockings, mitts, etc., and some of them have shown great aptitude for dress making; principally Bella Slater and Lydia Sutherland. We are in hopes of having a sufficient number of large girls in the Home to be enabled to have some of them taught tailoring, which is one of the most useful industries for Indian girls.

TRADE SHOPS.

Printing Office—There are six pupils being taught the trade of printing. They perform all the mechanical work in connection with our weekly paper (Advocate) and are occasionally allowed to do a little editing for it also. There is also a great deal of job printing for the merchants, farmers and municipalities which is done here. This latter is chiefly executed by Jeremiah Cochrane, who has been three years at this business and is now a good workman. Fred Pratt, the captain of the school, is working at this trade, as is also Miles Cochrane and Angus Prince, two very expert compositors. Next to these two boys in expertness in type-setting and running the presses is Dummy Nap-ia-mo-kin-ma. This boy is a marvel, being a deaf mute. He is a Blackfoot and was taken into the school in 1891. He has been at this trade three years and is now 17 years of age. He can read, write, do sums, is a fine, strong, intelligent lad of fine physique, and is unusually careful of his personal appearance.

Boot Shop—There are ten pupils learning boot and shoe making. All qualities of the work are turned out from this shop; from the strong boot for the labouring man to the fine riding boots for officers of the North-west Mounted Police. Machines have been furnished by the government to do such portions of the work as is usually done in that way, and the boys complete the rest. All the boots for the pupils are made here also. Several exhibits of their work were shown at the Territorial Industrial Fair that was held at Regina this year, and in every class in which they competed they carried off the honours. William Bear is the best workman among the boys.

Tailor Shop—Six pupils are learning this trade; as yet most of them are young, Walter McCrae, 14 years old, being the most advanced. They are making very fair progress and are of great assistance in the shop. A large custom trade is done in the town of Elkhorn, as well as in towns along the Canadian Pacific Railway as far west as Moose Jaw. All the boys' suits are made here, and if the reader could see the boys dressed in their uniforms it would be seen what reason we have to be proud of our young workmen.

Carpenter Shop.—Ten boys are learning to be carpenters. In this shop the Blackfeet boys predominate in numbers. John Cook, a Cree from St. Peter's and the captain of the school football team, is the most advanced pupil. They put up buildings, make hay racks, cutters, buggies, gun stocks, build boats, make all kinds of cabinet work, and do all the repairs to buildings, including glazing, painting, &c. This is a favorite trade with Indian boys, and while some show greater aptitude for it than others, they all like it.

Blacksmithing.—We do not conduct a blacksmith business, but we have three boys learning this trade with Mr. W. J. Taggart, of this town. Two of them are Blood Indians and the other a Cree. They are likely to become good workmen.

Harness-making.—Two boys are learning this trade with Mr. John Carwin, who conducts a harness business in Elkhorn. One of these boys, Chas. A. McDonald, is already a first-class workman, his set of harness having gained a first prize at the Territorial Fair. The other boy, Donald Brass, is a beginner, coming first to the school in November, 1894.

Tinsmithing.—We have one boy, Neil Yellow-Wing, a Blood Indian, being taught this trade by Mr. James Ellerington, who has a shop in this town. He is of a mechanical turn of mind and will make a skilful tradesman; he likes it and is very regular in his attendance.

Storekeeping.—Messrs. Wilcox & Ramsay are dealers in dry goods, groceries, crockeryware, and general merchandise in Elkhorn. For three years, Albert E. Kennedy, a Cree Indian, now 17 years old, has worked with them, learning all parts of their business; he has proved such an apt pupil that he is one of the most valued assistants, being quite expert in showing dry goods, men's and women's clothes, as well as in weighing out and parcelling tea, sugar, etc.

A reference to the balance sheets of our Trade Shops will show that this year we have nearly succeeded in making them self-supporting; in our next annual report, we hope to be able to show them to be a source of revenue. A great deal depends upon the general prosperity of this country; if we have a good harvest, all participate in the good times which it brings, and at this writing there is the finest prospect that it will be the best and most bountiful that the country has ever been blessed with.

Games.

Having taken these poor children from their "native heath" and in a measure forced upon them whiteman's ways of life, it is necessary (as they are, with all their stoicism, a fun-loving race) to provide amusement also after the whiteman's fashion. This has to be taught to them—even the simplest game that appears to be indigenous to a white child, has here to be taught. I have already spoken of our curling, as one of our winter amusements; another leading one is skating. I have been able to provide most of the older ones with skates, and during the winter afternoons those who have them are allowed to go to the rink after school; and in the long evenings

the older ones are permitted to go there also. This summer, football has taken the lead of all games; all play it from the youngest up. Our senior team have won many matches, notably carrying off the first prize at a tournament held in the town of Virden, where some half a dozen other clubs (formed of the most athletic white men in Manitoba) competed with them for the prize.

There are sixty-seven boys at present on our roll.

I must remark particularly upon the dutifulness and goodness of our pupils, some of them almost young men. We live in a town where liquor is sold and they mix freely with our fellow-townsmen, and no case of crime, disorderly or unbecoming conduct or insobriety has ever come under my notice. Their duties are performed willingly; they attend prayers and church services with evident pleasure, never an attempt at shirking anything; in fact I think that it is of Indian boys and girls this only can be said, but of them it can be said most truthfully.

The longer we are engaged in this work the more fully do we realize the great necessity of every one doing all in his power for the advancement of the Indians of the far western country. Could this fact be brought home more forcibly to our fellow-Christians, both in England and in Canada, there would be much more material assistance forthcoming; a perusal of this report brings out the fact of how circumscribed is our circle of friends; few of our children are individually supported. I remind you again that it takes only $50 annually in addition to the government grant to obtain for a child all the privileges of this school, and I take this opportunity of most earnestly asking for assistance to enable us to carry on this work energetically. I sincerely thank all who have in any way contributed to the maintenance of the children, especially to our kind friends in England, who have so generously and regularly aided us; also to the Woman's Auxiliary Missionary Association of the Church of England in Canada, which has done so much for us ever since the Home was first opened. With feelings of great thankfulness to our Heavenly Father, who has strengthened our hands and preserved our health in this work, and believing that, if it is His will that we should continue to labour in this field, the way as hitherto will be made clear.

Respectfully submitted,

ARCHIBALD E. WILSON.

INDIAN AGENT'S OFFICE, HOBBEMA, 20th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my fifth annual report, together with tabular statement and inventory of government property under my charge, for the fiscal year ended 30th June, 1895.

Although there are five reserves in this agency, there can now only be considered to be three bands of Indians, viz., Sampson's Band, No. 138, Ermineskin's Band, No. 137, and Louis Bull's Band, No. 140; the other two bands having been absorbed in these and the bands of other agencies.

At our annual treaty payments in November last, our pay-sheet showed twenty-nine births and twenty deaths; since that time, to the end of the fiscal year, there has also been a considerable increase of births over deaths, in fact ever since these Indians settled down to steady work they have gradually increased in numbers, and their health has very much improved, so there is little doubt as they advance in civilization they will continue to increase in numbers, and they will become a more robust and healthy people.

Cattle.

In my last annual report we had seven hundred and nine head of cattle; we now have eight hundred and thirty-five.

When I took charge of this agency in December, 1890, nearly five years ago, I received three hundred and thirty-nine head of cattle, as follows, viz.: work oxen, ninety-four; bulls, six; steers, thirty-seven; cows, eighty-five; heifers, twenty, six; bull calves, sixty-one; heifer calves, thirty. From these we sent thirty-one head to White Whale Lake, with Sharphead's Band, thus leaving us with a mixed herd of three hundred and eight head, so that it will be seen there has been an increase of five hundred and twenty-seven head.

This increase at a low valuation would amount to $10,540.00.

In addition to this the Indians have received in cash for cattle sold for beef, $2,823.00, thus giving a profit out of their cattle, in five years, of $13,363.00.

The above statement will show that the Indians in this agency take very good care of their cattle, and that they are making permanent and rapid strides towards independence.

In the foregoing account I have omitted to deduct eight bulls which were paid for by the department.

Agriculture.

Our crops were only half of what they should have been in the ordinary course of events, owing to drouth and bad farming.

In March and April of last year, the Indians broke about forty steers and although these were fat when they first began to handle them, by the time they were ready to hitch them to the ploughs and harrows they were thin and not strong enough to do their work well; there was also an extra amount of work to do, as the fall previously the frost set in very early and consequently very little fall ploughing was done.

This spring, however, our crops were put in in first-class order, and from present appearances they will have a third more flour from this crop than will be required to carry over the whole agency for twelve months. The working Indians in this agency have not only supplied all their own flour since August, 1893, but have also supplied nearly all the flour required for their destitute Indians.

If space would permit me to give a detailed statement of their farming operations during the last five years, it would be equally as favourable a showing as that of the cattle.

Mills.

Our grist-mill has proved to be a profitable investment and has done good work, although during a part of the winter, owing to the lowness of the water, we were only able to run it a short time each day.

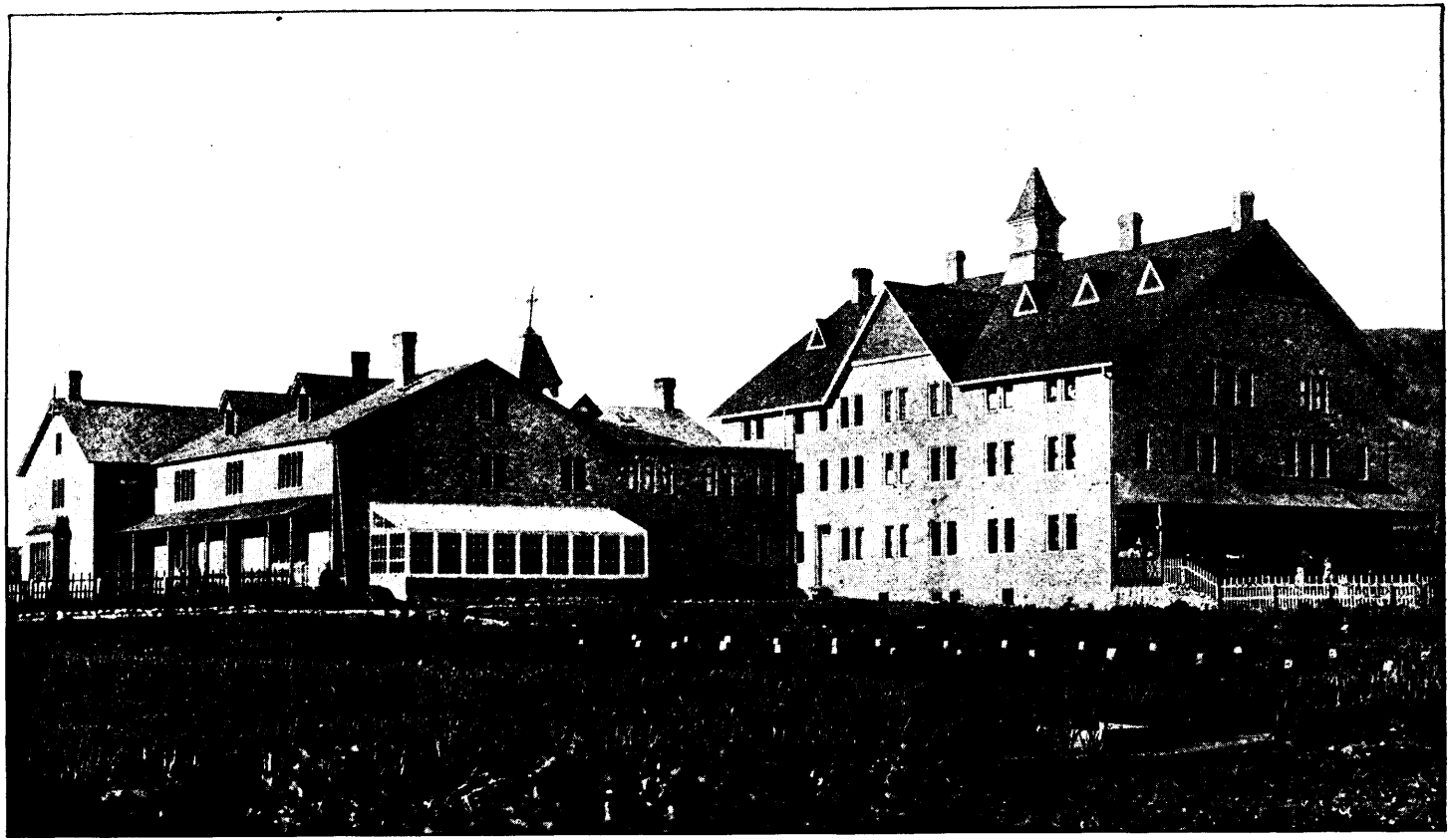
It was not closed down for a single hour with the frost.

Whenever we have a miller running the mill during the day time the Indians run it at night, and this spring the mill was operated for about six weeks exclusively by our Indians, and during that time they also did considerable grinding for neighbouring white settlers and gave them in every instance entire satisfaction.

We have recently purchased a saw and shingle mill, and will shortly have them in running order and attached to the water power.

The Indians during the past winter cut about four thousand sawlogs, so that when these are sawn into lumber they will be able to build a better class of dwelling houses and outbuildings.

Our water power in future will be used for threshing, grinding, chopping, sawing lumber and shingles, also cutting our firewood, so that, although our water power has cost us a great deal of work, it will be very useful to us.



QU'APPELLE INDIAN INDUSTRIAL SCHOOL.

Pigs.

Last summer we purchased eight brood sows and two boars; from these we now have about seventy pigs, and will, in all probability, in another year be able to supply our own pork.

Schools.

The schools continue the same as heretofore, with the exception of that on Ermineskin's Reserve, which, in addition to the day school, now has a boarding school attached; and I may say that the attendance since the present staff of teachers (the Reverend Sisters of the Assumption) have assumed charge of the school, has been exceptionally good, and the progress that the pupils have made under their tuition has been very marked. This school is under the auspices of the Roman Catholic Church.

The other two schools, one on Sampson's and one on Louis Bull's Reserves, are under the auspices of the Methodist Church. The attendance has been good during the year and the children are making good progress, especially in the English language.

The teachers on both these reserves are the same, Mr. Yeomans in charge of Louis Bull's school and Miss Shaw of Sampson's.

The missionaries are the same, the Rev. O. E. German in charge of the Methodist work and the Rev. Father Gabillon, O.M.I., in charge of the Roman Catholic mission.

Both of these reverend gentlemen express themselves as being highly pleased with the progress their Indians are making spiritually and temporally, and I am pleased to report that everything during the year has worked very harmoniously between the missionaries, teachers and employees of the agency.

Employees.

Mr. C. J. Johnson continues to fill the position of clerk and has discharged his duties in a very satisfactory manner. Mr. Moore still holds the position of farmer at Bear's Hills, and, as he is becoming more acquainted with his work and the Indians, he is now giving better satisfaction than at first. Gilbert Whitford still continues as agency interpreter and is a very useful member of the staff.

I have the honour to be, sir,
Your obedient servant,

D. L. CLINK,
Indian Agent.

INDUSTRIAL SCHOOL,
QU'APPELLE, N.W.T., 15th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report for the past fiscal year.

It is now about ten full years since this school was started. As originally built it was only capable of receiving thirty boys, as industrial education for Indians was then in its experimental stage and it was even doubtful if the Indians would allow their children to attend a boarding school at all. In 1887 an addition was built and an enrolment of seventy-five boys allowed; a few girls were also admitted and occu

pied a garret above the boys' dormitory. In 1889 an addition, specially for girls, was erected and the enrolment increased to two hundred, about half of which were boys and half girls. The addition for hospital, dormitory and class accommodation commenced last year, and being completed now, besides giving the necessary accommodation for at least twenty-five more pupils, will supply the dormitory space we have been in want of for some time, and will fill a long felt want in giving suitable accommodation and isolation for the sick.

During the year the general health of the pupils has been good, though we were visited by the influenza during the month of May. Consumption continues to be our greatest enemy, though at present we have only two cases that are serious. Compared with former years, the school has been wonderfully free from scrofula, there being only three or four cases now. Undoubtedly the large amount of vegetables consumed and the care taken of the pupils, especially the sick, by the reverend sisters and Dr. Seymour, have helped towards this most desirable end.

It is noticeable that pupils who have a mixture of white blood, however little, are healthier and rally better after sickness than the pure Indian. Nearly every case of death from consumption we have had here, has been clearly hereditary. Of the numerous children we have had from the O'Soup Reserve we have only lost one during the past ten years. This, I think, is owing to the prosperous condition and advanced state of civilization of that reserve, where the children are properly nurtured when young and where the parents appear to be healthy; proving that it is not the confinement or sedentary life of the school that causes consumption, but that it is hereditary or contracted at an early age at home.

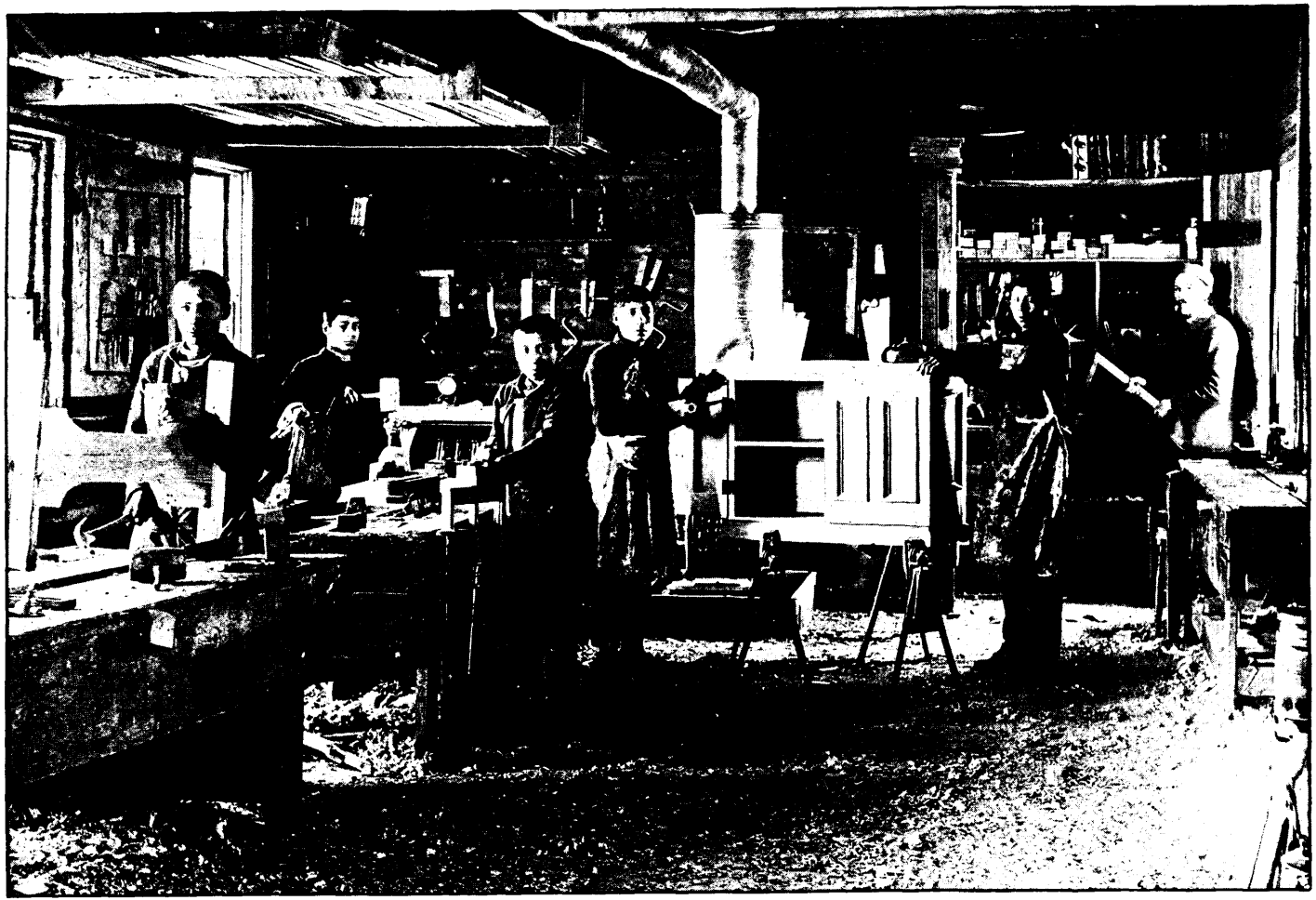
The authorized enrolment for the past year was two hundred and twenty, of which number two hundred were entitled to the *per capita* grant, and twenty were to be at service. The average actual attendance for the year fell a little short of this, being one hundred and ninety-eight (about one hundred boys and one hundred and eighteen girls), and the average number at service was nineteen.

The boys and girls use separate class rooms and are each in two divisions, there being two teachers for each sex. The classes are divided into six standards as prescribed in the programme of studies, which is strictly adhered to.

All instruction is given in English, and every effort is made to encourage its use in conversation outside.

The progress of the pupils in all their studies has been very satisfactory, and special credit is due to Messrs. Dennehy and Brangan under whose excellent teaching the boys have made marked improvement—as was shown by the Territorial exhibition held in Regina, where of 18 prizes awarded this institution nine were for school work; six first and two second prizes being won in open competion with the white schools of Manitoba and the Territories; the other first prize, together with a diploma, being for the best general exhibit from industrial schools. Our brass band obtained first prize in competition with all other Indian bands, and was selected and played nearly every afternoon and evening for the performers and during the races in front of the grand stand. Eight prizes were secured for garden produce in open competition with Manitoba and the Territories, and had it not been for the frost we had late in May, which, as I stated in my report for that month, destroyed most of our garden, I have no doubt that we should have secured several more prizes.

The Qu'Appelle *Vidette*, in an editorial of the 8th inst., referred to our exhibit as follows:—"No institution achieved a greater success at the fair than the Qu'Appelle Industrial School. It had splendid exhibits in all departments. The samples of blacksmith work excited particular admiration, while the school work was the best shown, taking no less than six first and two second prizes in the competition open to all the North-west. Father Hugonnard was also very successful with his vegetable exhibit, taking first prize for squash and early cabbage, second prize for vegetable marrows, and third prizes for savoys, summer cabbage, egg plant, and collection of cultivated fruits. The needle work shown by the girls' department of the school was likewise very good, and a capital model of the school received much attention. But the crowning success was the band, whose playing was always



CARPENTER'S SHOP, QU'APPELLE INDIAN INDUSTRIAL SCHOOL,

SHOWING INSTRUCTOR AND INDIAN BOYS.

received with well-earned applause. The boys' skill excited much surprise among the strangers. They also had the honour of receiving the special prize for bands given by Lord Aberdeen, and were engaged to play at the State dinner and to supply nearly all the music at the grand stand performances."

The girls have a playground fenced in, adjoining the garden, and ornamented with trees.

The boys have their playground on the other side of the house where they enjoy cricket and football—the grounds are too small for lacrosse.

The large hall for gymnastics, drill and entertainments is well patronized, especially during the winter, by the boys and girls, who have appointed times to take exercise in it.

Among the industries taught the boys, farming is the most practical, healthiest and most important, and though we have only a few boys shown as being regularly employed on the farm, all the boys learn farming, working in the fields and garden during fatigues and on Saturdays, and for whole days during haying, seeding and harvesting, and of course when hired out with farmers.

The other industries taught are carpentry, blacksmithing, shoemaking, painting and baking.

The carpenter and his boys have been kept busy on the new additions, in making furniture and doing repairs, and have done a considerable amount of work for the different agencies and for the public, mostly in the wheelwright line.

The blacksmith and his apprentices, besides doing all our own work and helping to erect the furnaces, etc., in the new building, have done a lot of custom work.

The shoemaker has all the work he can do to keep up the boot and harness repairing. This trade we find unfavourable to the health of pupils engaged in it, and the doctor recommends their not being kept very long at it. It appears that constantly repairing boots, necessitating a stooping position, is much harder on a boy than doing new work.

The furnace and night-watchman does the painting, kalsomining and repairing to plaster, walls, etc., with the help of the boys, who, with him, did the repairs and painting for the File Hills Agency this spring.

The baker and his assistants are kept busy making the bread and cutting the beef for the kitchen.

Under the direction of the sisters, the girls are taught housework in all its branches, all the clothing for the girls and most of that for the boys being made in the institution. They do not have as much class instruction as the boys, as much of their time is occupied in cooking, sewing, mending, housework, knitting, washing, etc.

As a proof that the training the girls receive here is appreciated by the surrounding white population, we have constantly on file many more applications for domestic servants than we can fill. The average number of girls in service during the past year was nineteen, who received in wages from five to ten dollars per month.

The employees discharge their duties faithfully. The book-keeping is heavy, but is ably done by Mr. Sworder. The school-teachers, as I observed before, deserve special praise; their duties are particularly arduous, necessitating their being on duty every alternate day from half-past five in the morning till eight o'clock in the evening, with only two hours' intermission. Every employee has to be on duty at least ten hours each day.

The additions to the stable and the pig sty, authorized last year, were completed this spring.

Owing to the drouth last year, we were short of grain and vegetables; this, I hope, will not be the case this year, as the prospects of an abundant harvest are good.

The addition for hospital and small children is nearly completed and is a good and substantial building.

Our garden has been considerably enlarged, and during the summer requires the services of a practical man to direct and oversee the pupils in digging, sowing, weeding, cultivating, watering, etc.

The main entrance to the school has been much improved, a new graded roadway having been made, and trees and shrubs planted on either side of it.

The very large number of visitors who come to see the school proves the interest the public take in the education and civilization of the Indian, and the hearty expressions of approval and good-will we receive are very encouraging.

I am greatly indebted to the agents of the surrounding reserves for their earnest co-operation in forwarding the interests of education, and the concern they take in the welfare of the pupils who have left the school.

I have the honour to be, sir,
Your obedient servant,
J. HUGONNARD,
Principal.

INDIAN INDUSTRIAL SCHOOL, REGINA, 14th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report together with inventory of all government property under my charge for the fiscal year ended 30th June, 1895.

The average attendance for the year was one hundred and twenty, an increase of fourteen over the previous year.

In making a review of the year's work I am pleased to report a decided progress in every department.

The Class Rooms.

As in former years, regular teaching has been carried on in two departments. An interesting feature of the senior work is a daily discussion of the events of the day, and this among other benefits creates in the pupils a greater desire than they would otherwise have to read the daily newspapers. In the junior room, the kindergarten supplies forwarded from Ottawa have proved to be a valuable help.

The House Work.

In the different departments under the direction of the matron, including the sewing room, laundry and kitchen, satisfactory work has been accomplished. After spending a month in a department, the older girls are transferred to another department, but during that month it is the constant endeavour of the teachers in charge to correct as many errors and to give as much instruction as they possibly can. In connection with the sewing room, authority was recently granted for the engagement of a tailoress. This will enable us at a reduced cost to make up much of the boys' clothing.

The Farm.

We regard the farm as very valuable, both as a source of income and a means of instruction. Most of our out-pupils will be engaged on farms, and it is of importance to every boy in the school that he should understand something about farm work. The development of this industry will be very much hampered unless we secure some pasture land. We have over one hundred and six acres under crop, all of which, with our garden and vegetables, is in very excellent condition. Mr. James Milne has been our farming instructor for nearly three years; as a gentlemanly, careful and methodical instructor it would be hard to find his equal.

The Carpenter Shop.

On an average about twelve boys have been engaged as apprentices. Mr. Aitchison, the instructor, as a cabinet maker is furnished with ample indoor employment for himself and boys, in the winter months; during the summer considerable outdoor work is done. A substantial stable 30 x 60 was built, also a principal's residence 28 x 32. Six of the boys were engaged by the contractor at the Territorial Fair Buildings at the rate of $1.25 per day.

The Shoe and Harness Shop.

Mr. Densmore continues in charge of these two departments. Four of the boys are fair harness-makers. We secured orders from the department for twenty-one sets of harness, at contract rates. In addition to filling a number of orders for outside customers, we supplied all our wants in boots and shoes, and also made up a supply for school use of leather mitts, shoepacks and slippers.

The Printing Office.

This office was opened in November. An instructor was engaged for four months. After this two of the boys who had no previous training in typesetting were competent to take full charge of the work, and the instructor's services were dispensed with. Since that time "Progress," a semi-monthly school paper of twelve pages, has regularly appeared. Mr. D. C. Munroe, the head teacher, whose very helpful influence is felt in every direction, is the editor. We have five hundred paid up subscribers, and about fifty exchanges including many school papers from the United States. These exchanges are made use of in our large reading room.

General Notes.

I am pleased to state that English is uniformly used by the pupils. The children seem almost without exception to be contented and happy. They have the affectionate regard of all their teachers. Good health has prevailed in the institution, caused in no small degree by good ventilation, good diet, outdoor exercise, and the watchful care by the various members of the staff. Our lacrosse team entered into competition for the championship of the North-west Territories. Many of the boys are good athletes, and enjoy all manner of manly sports. The intellectual activity among pupils is at its keenest in the winter months. Our various societies, literary, missionary and temperance never enjoyed a more successful season than last winter.

In concluding my report I might mention that during the month of June, Lucy, a sweet faced orphan Indian girl, about six years of age, was adopted into a comfortable home in Ontario. She was quite willing for the change, and now removed from every Indian influence, her education will be continued under very promising conditions.

I have the honour to be, sir,

Your obedient servant,

A. J. McLEOD, *Principal.*

BLACKFOOT AGENCY, TREATY No. 7,
DISTRICT OF ALBERTA, 17th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report and tabular statement for the year ended 30th June, 1895.

Severe droughts with hot winds in July rendered the crops of 1894 almost a total failure. Only a few bushels of grain were harvested, and the yield of potatoes was very much below the average crop. The prospects for this year, however, are much brighter, owing to heavy rains in June, which although rather late have had a marked effect on the growing crops. A fair general yield may be expected at the lower reserve; and at the north reserve, although the rains were too late to save the grain, the crop of potatoes will from present prospects be fairly good, although slightly damaged by June frosts.

Mr. Ponton, D. L. S., was here during the early part of the summer engaged in constructing the irrigation ditch at the north reserve. He deserves great credit for the tireless energy with which he carried on the work and the excellent results he obtained from Indian labour, and when he has effected one or two improvements may be congratulated on having made irrigation on this reserve a complete success.

Land is now being broken in the vicinity of the ditch at points where it can be irrigated, so that in future droughts, however severe, will not affect the crops at the north reserve.

Chief Inspector Wadsworth and Inspector McGibbon visited the reserve during the year and went through their inspections in the most thorough manner.

The Indian earnings for the year amount to $3,700, made up of the following items:—coal, $504; hay, $879; stock, $335; work on ditch, $506; general work, $1,476. Six Indians have been steadily employed by Messrs. Beaupré Bros. in connection with their beef contract, and the amounts earned have been expended as received in purchasing blankets, clothing, tea, tobacco, etc.

The Indians have bought several wagons and mowers themselves, paid for by instalments out of their treaty money, and they now possess as their private property 12 wagons, 13 mowers and horserakes, 4 buckboards, and 6 sets of double harness. They own besides many smaller implements.

The Indians have made good progress in their mode of living. A number have now bedsteads, tables and seats, have roofed their houses with shingles, and divided them with solid partitions. The lumber recently supplied by the department will be used in finishing off those houses whose owners are anxious but unable to provide the material themselves. The houses are kept cleaner than formerly; lime is more freely used in whitewashing, and greater attention is paid to the surroundings. On the whole, I may say that with the implements they have purchased, and the heifers they are ready to take over from the department, they have made great strides towards civilization, which, with the benefit derived from irrigation, will be more plainly seen before the close of the present year.

The Indian villages are scattered along both sides of the river for a distance of twenty-five miles.

A few Indians took cattle in exchange for ponies. One man has now a small herd of twenty-seven head. He milks twelve cows, makes and sells butter, and is in a prosperous way.

The Sun Dance was held here in June. It is now a mere religious ceremony; no torturing is done. It will, if no opposition is offered, gradually die out.

The two boarding schools have been fairly successful, which cannot be said of the day schools. The former are gradually acquiring the children who used to attend the day schools, and the benefit they will derive from the change will soon be apparent. The day school at Eagle Rib's village was accidentally burnt down in June. The building included both a school room and teacher's residence, and it was completely destroyed.

Doctor Lindsay visited the reserve frequently during the year, and vaccinated those Indians who had not been previously operated on, and those on whom the vaccination had not taken.

A new hospital has been built at the north reserve by the Church of England mission, assisted by the department, and when it is in running order, it will be of great assistance to the doctor in the treatment of serious cases.

During the year there have been fifty-five births and eighty-eight deaths. Lung disease in its different forms and scrofula may be held chiefly responsible for the excess of deaths, many of which were those of young children.

The younger Indians have been making birch brooms, baskets, mats, and doing other industrial work, principally under the instruction of the school teachers, and I have no doubt that, when transferred to industrial schools, many of the children will show a taste for industrial work now being developed on the reserve.

The parents are now beginning to see the benefits which their children derive from education.

The payments of 1894 passed off quite quietly, the conduct of the Indians being excellent; the North-west Mounted Police furnishing the usual escort.

Some of the Indians went to Calgary after the payments, and several were arrested there for being in possession of intoxicants. They were punished together with the person who supplied the liquor.

The officials, Messrs. J. Lawrence, clerk, G. H. Wheatley and W. M. Baker, farming instructors, and T. B. Lander, issuer, have all given me great assistance in carrying out the rules of the department, and I think that the year just ended may be considered very satisfactory.

I have the honour to be, sir,
Your obedient servant,

MAGNUS BEGG,
Indian Agent.

TREATY NO. 4, MUSCOWPETUNG'S AGENCY, 23rd August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my report, tabular statement and inventory of government property under my charge for the year ended 30th June, 1895.

The past year has been the most trying our Indians have experienced since settling on the reserves: the general depression the world over and total failure of all crops in this district through continued drought and excessive heat, cutting off all returns from farming operations, left the Indians entirely dependent on other sources to pass over the crisis. The hay and wood industries were utilized to the utmost, and the assistance we required from the department was very little. This in itself is the very best evidence I can offer to show our Indians are steadily advancing, and with prosperous seasons would in a few years be entirely self-supporting. The aged, widows and orphans, and those that are unable to work, will of course require to be looked after.

The condition of the houses on all the reserves during the winter was creditable, floors scrubbed regularly and surroundings kept clean and tidy. Bedsteads, chairs and tables are becoming very general, giving an air of home comfort. The stables are also well kept, are fitted up with stanchions and hay corrals adjoining.

The work of seeding this spring was well done and the prospect of a bountiful harvest is most excellent.

The Indians derived a large amount of money this summer from gathering seneca root; but, as this work takes them off the reserves for weeks at a time, and

keeps up the old habit of roaming over the prairies, I am of the opinion the benefit is counteracted by their absence from the reserves, and consequently there is not the attention given to gardens, root crops and ploughing which should be given at that time.

The Indians continue to enjoy good health, and no epidemic of any kind occurred during the year.

The winter was most favourable for stock, and they turned out in the spring in good condition, the increase being most satisfactory, especially in the government herd. From this band we supply all our own beef and work oxen, and have a surplus of thirty heifers for transfer to some other agency. The pedigree Galloway bulls have proved hardy, and are suitable in every respect for this country. At the round up of the government herd we branded ninety calves from a total of one hundred and three cows, and they are the finest lot of calves we ever had.

Small game was not so plentiful the past year, but the Indians appeared to get their share. Fishing was not carried on to the same extent as in former years, as the Indians were engaged in the wood industry, which evidently paid them better. All who took the trouble to set out nets were amply repaid for their trouble, as the supply of fish in the lakes was good.

During spare hours in the winter the Indians engage in the manufacture of bob-sleighs, jumpers, ox collars, harness of all kinds made from leather of their own tanning, axe handles, fork handles, etc., etc.; the women in knitting, dress-making, general sewing, mending, tanning hides, etc., etc.

The question of education is receiving constant attention, and I am pleased to say the reserves are well represented at the industrial schools at Qu'Appelle and Regina, and that the number of children of school age remaining on the reserves is very small.

The only day school in the agency, at the Sioux Reserve, was closed on the 30th June, as the attendance was so irregular the scholars were doing no good, and the school was a detriment to the industrial school at Qu'Appelle, by having children on the roll who will now be drafted to Qu'Appelle.

Of the four bands in the agency, viz., Piapot, Muscowpetung, Pasquah and Standing Buffalo (Sioux), the most marked advancement all round has taken place at Piapot's. Big Sky, of that band, does most of the blacksmith work on the reserve, and, considering he has acquired all his knowledge of the trade by close observation, it is wonderful the work the man can turn out; there are also several other Indians of the same band who are very handy at the forge and can do ordinary repairs.

Two wagons, one mower and rake have been purchased by the Indians during the year, also six sets of double horse harness, suitable for drawing hay and wood to Regina. The more advanced Indians are using horses on the road for freighting purposes.

The annuity payments commenced on the 2nd of November and ended on the 5th. Each band was paid on its own reserve; all the traders present had procured from the department the usual license issued for the privilege of trading on the reserves.

Standing Buffalo's Band (Sioux), owing to the total failure of their crops last year, it was found necessary to assist with seed-grain this spring, as it took their entire earnings during the year to supply themselves with food and clothing, which was done without calling on the department.

The agency and farm buildings have received the necessary repairs and painting to keep them in proper condition.

I have the honour to be, sir,
Your obedient servant,

J. B. LASH,
Indian Agent.

Department of Indian Affairs.

MEDICAL SUPERINTENDENCY,
WINNIPEG, MAN., 28th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report that the general health of the Indians under my supervision has during the past year been fairly good. Scrofula in its various forms, and consumption, the chief source of ill health and mortality amongst the Indian population, are still largely prevalent, though the observation of sanitary laws is beginning to be a little understood amongst the Indians, and its beneficial results are observed.

I would again urge, however, the importance of establishing a hospital for the special treatment of those diseases, and for the general management of serious cases amongst the Indian population, with a training school attached, for educating Indian nurses. Such an establishment would, I am sure, be the means of vastly lessening the terrible suffering of these poor people by the prevalence of tuberculosis, as well as educating, through the nurses and the people treated, the general Indian population in sanitary regulations and thus demonstrating to them the wonderful effect their strict observance has in preventing and mitigating the terrible suffering and mortality from scrofula, and also guarding against other contagious diseases and in the general preservation of health.

Epidemics have not generally prevailed during the year, except that of whooping cough, which in St. Peter's and some other reserves has been wide-spread, and during the spring was complicated with bronchitis and pneumonia, and resulted in a number of deaths, chiefly in very young children.

Operations of various kinds have been performed by me, as well as in some cases of emergency by Dr. Grain of Selkirk, chiefly for the removal of scrofulous glands and bones. One rare and most difficult operation—excision of the whole joint and removal of diseased portions of the pelvic bones, was successfully performed by me, in the St. Bonifice Hospital upon Peter Smith, a young man from St. Peter's who was sent home from the Elkhorn School in a most deplorable state, with running sores in every direction, from these diseased bones. My specially devised bed and splint for which I asked the department to pay, was most valuable in facilitating the dressing and lessening the suffering and pain of the after treatment, which necessitated months of rest, in one position. Unless a bad cough which he has, should develop into consumption or fresh disease arise, his final recovery is now assured, four months having elapsed since the operation. During my tours of yearly inspection I removed a cancerous growth from the lip of a woman at Cumberland, requiring a considerable portion of the chin skin to be removed. I also performed several other minor operations. I sent into Selkirk, Robert Cork, who for several years has suffered from scrofulous enlargement of the testicles complicated with a hernia. It presented an immense mass of disease, and, as he refused to go into the hospital from some absurd prejudice, and I could not alone operate on him at "The Pas," I wrote to Dr. Grain to get the necessary assistance and operate on him, so that if possible he could be sent back by the steamer late in September of this year. Of course I could not get back from my inspection tour in time to operate myself, and it was an urgent case.

In the Cumberland case on which I operated, I may here say, I was most intelligently assisted by Mr. McCombe, whose genial usefulness in dispensing medicines, and treating simple cases, is to be highly commended.

Schools.—The day schools are generally much improved in a sanitary point of view, though I regret that some of the new schools were devoid of the fire place and chimney which I think so essential for ventilation, etc. The cheapest remedy for this defect would be to have one of my devised stovepipe ventilators in such schools. Several school houses are in a wretched condition, notably Dog Creek, Cedar Lake and Grand Rapids, which, from a sanitary point of view, are utterly unfit for occupation. Though the fire place is made unnecessarily large, the Water Hen school is almost a model of a clean, well ventilated school house, and Mr. Adams is

to be highly commended for the excellent condition in which he keeps it, as well as for the energy he has displayed in instilling sanitary directions into the habits of the people, whose houses I found were all clean and well whitewashed, etc. In the same connection, I wish to mention Mr. McDougal, of St. Peter's, and Mr. Lambe, of Cedar Lake, both of whom evince high intelligence, not only as teachers, but in drawing the attention of the people to the sanitary regulations and cleanliness.

The Industrial Schools.—During the latter part of the winter and spring a great deal of sickness prevailed, pneumonia and bronchitis chiefly, with again a few cases of typhoid fever. Mrs. Ashby, as well as Mr. Ashby, was indefatigable in her efforts, as also the staff, in attention to nursing and caring for the sick. Poor Mrs. Ashby was terribly run down in health, as a consequence, and should even yet be given a short leave of absence to recruit her health before the winter. If the proposed addition is made to the building, a different system of heating and ventilation should be adopted. A suitable modification of that in use at the Victoria Hospital in Montreal, would be most economical and efficient. It would consist of an iron stack for the smoke through from the basement where the furnace is, to a fair height above the building, and in the centre of the buildings surrounding this is another larger of sheet iron, forming a drum around the smoke stack from the first floor to the roof and opening a few feet above and protected by an iron roof, a couple of feet or so above the opening, so arranged as to prevent snow or rain drifting into the drum, which is in reality the foul air aspirator. Openings are made for ingress of the foul air ducts from each flat by thus extracting the already used and noxious air, by the powerful up draft which will be caused by the heated smoke stack. Fresh air, it is well known, will find its way in without draft at any window or door, as well as even through the walls themselves, and if more fresh air is required, by ducts opening through wire gauze outside and inside to prevent too much draft, and each duct should, in my opinion, contain a lump of rock salt for the air to pass over. These ducts for ingress of fresh air, could be at the top of each window, and arranged to shut off or open as required; the air thus entering above the occupants of the apartments, will be warmed, to a great extent, before coming in contact with the occupants, and the foul air being extracted through lower parts of each room or hallway, a gentle current of fresh air will be continually passing through. It is not necessary in very cold weather to open these fresh air ducts, as sufficient air will enter to take the place of the extracted foul air by other channels as referred to. If it is necessary to have closets in the basement, they could be on the Dukes system, that is having a pipe extending from them direct into the smoke stack and all communication with the upper flats completely shut off, or as near so as can be.

Such a simple system would at once be the most economical and effective system of ventilating and heating, either by hot air or hot water, the latter being far preferable.

The St. Boniface schools are, I think, preferably arranged from a sanitary point of view, though still defective, and less serious illness has occurred in both the girls' and boys' school than at St. Paul's.

In both schools I would strongly deprecate the admission in the future of children of a scrofulous character, whether with enlarged glands or bone affections, or with any marked tendency to consumption, both on account of the well-known infectious character of these diseases and from an economic point of view, it being better to educate and train thoroughly those only of robust constitutions, who are likely to live long useful lives.

In conclusion I may say that I have received every assistance from the energetic inspector and intelligent superintendent, Mr. McColl, and his staff, in carrying out sanitary regulations, as well as in ministering to the wants of the sick.

I have the honour to be, sir,
Your obedient servant,

GEO. T. ORTON, M.D.,
Med. Supt.

Department of Indian Affairs.

INDIAN AGENT'S OFFICE,
BIRTLE, MAN., 5th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended 30th June last, together with an inventory of government property and tabular statement.

The crop of 1894 was a light one, both as to yield and value. There was an insufficiency of rain during the early part of the season and hot winds swept over the grain fields early in August, which ripened the grain too rapidly, both of which causes affected the yield, and values during the principal marketing season were low: so the Indians realized, for the three reasons assigned, very little for the wheat last season. The quality was particularly good, all having been harvested weeks before the autumn frosts.

The past winter was on the whole a pleasant one. There was only a light snow fall, and travelling was easily accomplished anywhere over the prairie during nearly all the winter months. With the exception of a few days the weather was mild, and the spring practically opened up towards the end of March and made it possible for the stock to feed out after the 1st April. The Indians felt the benefit of the short winter, as instead of being deficient of fodder for their cattle, many of them had a surplus.

The seeding season was fairly favourable. This was followed by a spell of cool weather and frequent showers, during which time the grain plants took deep and strong root and the copious rains and warmer weather that came after advanced all vegetation very rapidly, and the prospects for a bountiful harvest were never more promising at any period in the history of this province than they are to-day; and I am glad to be able to report that the Indians of my district have as good grounds for hopefulness in this respect as their white brethren, and I trust that their expectations will be realized.

The Treaty Indians.

There are two classes of Indians within my agency, one class being those who, as well as their forefathers, originally occupied this portion of the Dominion, and who, by reason of such occupancy or inheritance, claimed ownership. They are known as "Treaty Indians" from the fact that they or their forefathers entered into a treaty with Her Majesty's Government whereby they relinquished their claim to the lands, retaining only small tracts for occupation by themselves and their children, which tracts of land are known as "reserves," and in lieu of their forsaking their claim to the forests, waters and prairie they and their descendants have and are to receive cash annuities for all time to come as well as other benefits.

The Sioux Indians.

The other class are the American Sioux, who in the year 1862 took refuge in British territory after they had massacred a great number of the white settlers in the State of Minnesota. The larger number settled in what was then known as the Red River district, and not far from where the city of Winnipeg now stands; while less numbers took up positions at the Turtle Mountains and other points. They went further afield than this. Efforts were made for several years by the American authorities to get their Indians to return to their former home, but without success, although amnesty for their past offences was promised them. And when this north western country passed from the rule of the honourable Hudson's Bay Company, and the province of Manitoba was established in the year 1870, the majority of these refugee Indians were yet residing at various points in this new province, and gaining their livelihood by hunting, fishing and labouring for the settlers. Frequent applications were made by them to the Lieutenant-Governors for a tract of land on which they could permanently settle,

and their request was acceded to about the year 1874, and two tracts of land were set apart for their use, one of which is at the junction of the Assiniboine and Bird Tail Rivers, and the other at the Assiniboine River where it is joined by the Oak Creek. And subsequently four more reserves were set apart, viz., at Pipestone Creek, at the base of Turtle Mountain, at the Qu'Appelle Lakes, and at the Moose Woods on the South Saskatchewan; the two last being outside of the limits of this agency.

The foregoing history of the Treaty and Sioux Indians is recited for the information of any who may peruse this report who are not cognizant of the fact that the Sioux who reside in the Dominion were American Indians, and that the assistance they have received has been given to them as a matter of grace and not of right.

The Bird Tail Sioux Band, No. 57, now numbers 81 souls. They have 260 acres of wheat, divided among 15 families, or an average of about 17 acres each; 65 acres under oats, 6 acres of potatoes, 8 acres of corn and over one acre of garden stuff. They have over 80 head of cattle, threshed 3,330 bushels of wheat last season, and the total yield of wheat this season promises to be over 5,000 bushels. The most progressive Indian on this reserve is Moses Bunn. He has 50 acres under wheat, 12 acres under oats, besides corn and a fairly good vegetable garden. He will probably have 1,000 bushels to sell this season, after retaining sufficient for seed for next spring and for family use. Of late years he has kept enough from his own growing to carry him over until the next harvest or threshing. This he takes to the grist-mill as circumstances require and exchanges it for flour and bran; the latter he feeds to his horses. His working horses are always in good condition, are kept in a good stable which has always been clean and in good order when inspected by me, the harness and grooming tools when not in use put carefully away on pins and receptacles arranged for the purpose. He has a granary, and a separate stable for his cattle, of which he has 10 head, besides a number of fowls. He has a fairly good log house, shingle roof, with a stairway leading to an upper room and an annex to the main house in which there is a cookstove and some other articles of furniture.

The room in the main house contains a stove, bedstead and bedding, table, clock, lamp and a few chairs; and pictures adorn the walls.

Two of the children of Moses Bunn are at the Birtle Boarding School.

Sunka Ho Nohan is Moses Bunn's strongest competitor in grain farming, he having forty-five acres of wheat and fifteen acres of oats, and Awican Nan leads at gardening, he having fully one acre of potatoes and a like quantity of corn, besides a good vegetable garden. Bookpa has the best and cleanest kept house on the reserve, together with good and well-kept stable and sheds for all his farming implements.

This reserve was subdivided a few years ago. Each family is now in occupation of an eighty-acre lot and, with the exception of a few individuals, they have straightened their fields close up to divisional lines and a few have placed large stones on the corners, on which I have inscribed their names and the number of the lots.

The Oak River Sioux Reserve, No. 58,

was also subdivided a few years ago, and each year since the Indians have been straightening their individual fields to the divisional lines of their lots, and as new houses or stables are erected they are placing them on their own lots—if before they were not so.

The Indians of this band are greatly encouraged this season by the promise of a bountiful harvest and higher values for wheat. They only threshed four thousand, five hundred and sixteen bushels, whereas, this season it promises to be close on to ten thousand bushels and from forty to fifty per cent higher in value, and if my expectations are realized, both as to yield and value, the Indians will be in a better position than they ever were before, and will, therefore, be encouraged to try to improve their position still further. They have approximately four hundred and ninety acres of wheat, sixty-one acres of oats twenty acres of potatoes, corn and

garden stuff and one hundred and forty-five head of cattle, for which over two hundred tons of hay is already stacked at their stables, and more will be put up; in addition they will have a large quantity of straw suitable for fodder.

Charles Hauska is the most extensive grain grower this season. He has fifty acres of wheat, seven of oats and about one acre of potatoes, corn and garden. He is closely followed by Charley Dowan, who has over fifty acres under crop.

This band is yet under the direct supervision of Mr. R. W. Scott, who has performed his duties as instructor in farming and guide in business matters, in a faithful and satisfactory manner.

Tunkan-cekeya-na is the acknowledged chief, and he has worked harmoniously and willingly with Mr. Scott to advance the best interests of the members of his band.

A few years ago too many members of this band were drifting into habits of intemperance, but I am glad to be able to report a marked improvement in this respect, and as an illustration to cite the fact that a few weeks ago three white men came on the reserve with intoxicating liquor, and a member of the band forcibly took possession of the intoxicants and handed them over to Mr. Scott, and the Indian's action seemed to meet with the approval of a large majority, if not all, of the members of the band.

This band now numbers two hundred and eighty-one.

The Oak Lake Sioux Band, No. 59,

have this season fifty-six acres under wheat, eleven under oats, and two acres of potatoes, corn and gardens.

Last season their wheat, owing to drought and hot winds, only yielded about seven bushels per acre, and they were not in a position to retain as much seed as they wished, otherwise they would have had a larger area under crop this season.

This band has been practically self-supporting for a number of years; they have fairly good stables for their cattle, of which they have seventeen head, and although their dwellings are not large, they are warm during the coldest weather and kept fairly clean.

Waske has the largest area under crop this season, which is twenty-five acres of wheat, eight acres of oats, and a small patch of potatoes, corn and garden stuff.

Fifteen acres of land had been summer-fallowed when I visited the reserve last month, and Sunka Waste was then engaged ploughing.

This band at present comprises forty-one members.

The Sioux at the Turtle Mountain Reserve, No. 60,

have about ten acres under oats, and about six acres of potatoes, corn and gardens.

This reserve is only one mile square—six hundred and forty acres—and the present number that comprise the band, is twenty-one, although there are usually double that number residing on the reserve, made up of visitors from the United States. This reserve is at the base of the Turtle Mountains, and within six miles of the international boundary, which in my opinion is much too close to the line for the welfare of our Indians, and probably the reason why this band have not prospered as much as the other Sioux bands in my agency.

Barring the foregoing objection as to location, it is a good point for Indians, as there are lakes on the mountain, in which fish are plentiful, game is fairly abundant and berries grow luxuriantly and these Indians gain a comparatively easy livelihood from these sources, together with their small crops of potatoes and corn.

There are fifteen head of cattle in the hands of this band.

The Sioux in my agency are not increasing in numbers. For reasons unknown to me they are not a multiplying race; few have large families, in fact the reverse.

There are two day schools in operation on the Sioux reserves. The one on the Turtle Mountain Reserve is under the auspices of the Christian Endeavour Society, of Deloraine, and in charge of the Rev. A. F. Mackenzie, a retired Presbyterian minister, and although the attendance seldom numbers more than four pupils, those that have attended have progressed creditably.

The attendance at the day school on the Oak River Reserve has been neither as large nor as regular as it ought to have been, neither has there been much advancement. Three pupils from this band have been in attendance at the Elkhorn Industrial School, two pupils at the Birtle Boarding and recently nine children were placed in the boarding school at Portage la Prairie by their parents.

Treaty Indians.

There are five bands of Treaty Indians within my agency, the names of which and the numbers that drew annuities at the last payment are as follows:—

Reserve No. 61,	Kee-see-koc-wenin's	129
do 62,	Way-way-see-cappo's	165
do 62½,	Valley River	66
do 63,	Silver Creek (Gambler's)	23
do 67,	Rolling River	116

Between the annuity payments of 1893 and 1894 there were twenty-four births and twenty-one deaths.

The Kee-see-koo-wenin's Reserve is better adapted for stock raising than grain growing.

The soil is a strong black loam, and grain is liable to grow too rank, and fail to ripen before the autumn frosts. They have under crop this season twelve acres of wheat, thirty acres of oats and about eight acres of potatoes and gardens.

The potatoes and garden stuff do not promise well owing to too frequent and heavy rains, but the wheat and oats look well, and, if they mature before the frosty season, the yield of both will be heavy.

The Little Saskatchewan River runs from the northern to the southern limit of this reserve, and affords a bountiful supply of clear fresh water for their stock at all seasons of the year, whilst both the bottom and high lands furnish excellent pasturage during the summer months and hay for the winter.

About one half of this band yet reside on the Riding Mountain, and in the vicinity of Lake Winnipegosis, where they gain a livehood, hunting, fishing and from the sale of seneca root.

Fur bearing animals are not so plentiful as they were a few years ago, and a livelihood is not now so easily obtained from this source.

The members of the band who reside on the reserve are year by year striving to better their positions and to live more comfortably by improving their dwellings, adding house furnishings, &c.

With one or two exceptions those who reside on the reserve have comfortable and well kept houses, in which are beds, chairs, tables, lamps and clocks, and the walls are adorned with pictures. Several families have rooms used exclusively for dormitories and nearly all take their meals from tables. They now have over one hundred head of cattle and a superior class of horses with which they carry on their farming operations.

All have good stables and provide ample fodder for their stock during the winter months.

During the fiscal year these Indians sold cattle for which they received over $200.00, with which they purchased implements, lumber and food. These sales not only encouraged the Indians, but proved to them that cattle could be profitably raised, and since the beginning of the present fiscal year further sales have been made that realized for the owners over $300.00.

The day school under the auspices of the Presbyterian Church is yet in operation. The average attendance for the year was eleven, besides which there were two pupils at the Regina Industrial and eight at the Birtle Boarding Schools from this reserve.

The reserve day school is still in charge of Miss MacIntosh, who is a faithful and efficient teacher, and the fruits of her labour are not only visible in the class-room, but in the homes and on the persons of her pupils.

Way-way-see-cappo's Band

had at the end of the fiscal year one hundred and thirty-eight head of cattle, and they have under wheat this year five acres and sixteen acres of potatoes and garden, which is double the area under potatoes that they had last year.

Although no great strides have been made by this band towards advancement, they are year by year exhibiting more disposition to depend upon themselves, and live more comfortably.

Last year they put up over eight hundred tons of hay, and did this work without any food assistance from me. They are providing better stables and taking better care of their cattle.

Many of them now evince some shame when I visit their houses and find them untidy, and Chief Astakeesic has lately purchased two bedsteads and half a dozen chairs, including a rocking and arm chair, and this gives me reason to hope that the good example set by the chief in trying to make his house a home, will be followed by other members of his band.

Fourteen children from this band were attending the Birtle Boarding School, and several more lately sought admittance; there is also one child at the Regina Industrial. With very few exceptions the Indians of this band now view as highly beneficial the schools that the government and the various Christian denominations are maintaining; whereas only a few years ago the majority of these Indians took strong objections against all schools; and when they did consent to place their children in them, they thought the government and the churches were the immediate gainers. This change of opinion in the minds of these Indians is evidence to me that they are on a considerably higher plane of civilization than they were.

The Valley River Band.

The band had a reserve surveyed last year on the river from which the band and the reserve take their name.

This river is a beautiful stream of pure crystal water, takes its rise on the Duck Mountain and flows in an easterly direction between the Duck and Riding Mountains.

This season two acres of oats have been put in, and about four acres of potatoes and gardens.

These Indians have twenty head of cattle, eighteen of which were acquired by themselves.

They have good houses and stables, live comfortably, and are practically self-supporting.

They gain their livelihood by hunting, fishing, tanning hides, sale of moccasins, bead work, and senega root, of which they gather considerable quantities during the summer months. Although there are about ten children of school age, I regret that none have yet taken advantage of the boarding or industrial schools that have been provided for the benefit of the Indians.

There are only two families residing on the Silver Creek or Gambler's Reserve, both of which live comfortably, but I regret to inform you, not peaceably, as their domestic troubles have not ceased. The wife of one of these Indians lately left her husband and home and returned to that of her father, and last spring the wife of the other did similarly, but afterwards returned. These two Indians have thirty-five head of cattle, besides a number of good horses, but have only put in about eight acres of grain and roots this season.

The Rolling River Band,

I am glad to be able to report, show more disposition to better their positions and live more comfortably. They have in many instances abandoned their old houses and erected much superior ones, and these have been kept noticeably clean and more tidy.

During the summer months nearly all live in tents, but when I visited them during last winter and they resided in their houses, I observed that several exhibited evidence of being regularly scrubbed and generally tidied up.

A great deal of credit is due for the improved state of affairs to Missionary W. J. Wright, who has been placed on this reserve by the Presbyterian Church, and who is constantly visiting and advising the Indians as to the best way of bettering their condition.

There are only two children of this band attending school, although there are fully twenty of school age in good health; the parents yet take strong objections against the schools, but I am hopeful that they will soon change their opinion in this respect.

They have twenty-six head of cattle, all of which are in good condition.

This band gain a large part of their livelihood during the summer months from the sale of senega root, and during the winter months they hunt, fish, tan hides, cut wood, etc., for a livelihood.

They have two and one-half acres of wheat, and fifteen families have small areas of potatoes and gardens.

The health of the Indians throughout my agency, I am glad to be able to report, has been generally good.

It is to be regretted that there are those among the whites, who at least assume to be superior to the Indians, who degrade themselves and their race by supplying the Indians with intoxicants. Several of such whites have been convicted during the year for so doing, but no doubt a much larger number have escaped punishment.

The Indian Educational Institutions,

from which the children of my agency are deriving direct benefit, in addition to the day schools to which I have referred in the foregoing report, are the Qu'Appelle, Regina and Elkhorn Industrial Schools, and the Portage la Prairie and Birtle Boarding Schools, but the last named is the only one that I officially inspect, and therefore the only one that I will specifically report upon.

Mr. Principal Gilmour has been the head of this institution and class tutor for the last nine months, and Miss McLaren, matron, since its inception, 3rd December, 1888. During the last part of the fiscal year, there were thirty-five pupils in attendance, and I understand the number is soon likely to be increased to forty pupils. Although the department only allows a grant for twenty-five pupils, the others are fed, clothed and educated by the Presbyterian Church authorities, under whose auspices this school is conducted.

To my mind a literate education of the Indian youths is of minor importance in comparison with industrial and moral training, and on this assumption I will only state that the pupils of the Birtle school are making fairly satisfactory progress in the class room, and will more fully review the industrial and moral instruction that the pupils have and are receiving.

The larger boys at the institution assist in the care of stock, of which six cows and two horses are kept. They are also instructed in vegetable gardening and the cultivation of roots, and about three acres of land are devoted to this purpose.

Hugh McKay, one of the earliest admitted pupils, yet spends part of each week in the local printing office and continues to give his employer good satisfaction.

There are several female pupils over fifteen years of age in this institution, they assist at all branches of housework, such as bread making, cooking, laundry work, sewing, knitting, etc., and last spring an inexpensive dairy building was erected in which the making of butter is carried on, the work is done by the girls referred to, but under the direction of an instructress. It is true that the most improved appliances are not used in this dairy, the object is to educate these girls to milk cows, take care of the milk and cream, and make as good a quality of butter as is possible to make and do it on such lines as it will be within the reach of these girls when they return to their homes, or are called upon at any future period of their lives

to fulfil the duties of an Indian farmer's wife. Cleanliness from the beginning of butter making to the finish is of the most importance, and they are well drilled on this point.

No opportunity is lost to disabuse the pupils' minds of the idea that a literary education without labour will bring success. There is some danger of this erroneous impression gaining ground among them.

The principal is under the conviction that a majority of his pupils must ultimately return to their reserves, or at least follow agricultural vocations, which opinion I share: and with this view, he is endeavouring to train the boys, and to fit the girls to perform their share of the work that falls on a farmer's wife.

In conclusion I wish to bear testimony to the exemplified morality that has been taught at this school since its inception, which unquestionably will be helpful to form and build up the character of the pupils, as well as those of their race with whom they come in contact in after life. If such is the result, there are no scales upon which can be weighed, no measure with which to determine the amount, no line of sufficent length to ascertain the depth, and no eye so farseeing as to behold the height, of permanent good that this education will accomplish.

I have the honour to be, sir,
Your obedient servant,
J. A. MARKLE,
Indian Agent.

St. Joseph's Mission,
William's Lake, B.C., 16th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to submit for your consideration my fourth annual report of the William's Lake Industrial School for the fiscal year ended 30th June, 1895.

The number of pupils authorized by the department was thirty-five; all the year round we have had our full number. When, last summer, we sent home to their parents all our big boys and big girls, their places were taken up immediately.

The general health has been very good. This year we have been free from all epidemic. There was no case of real sickness. One little girl was advised to go home on account of weak eyes, and one of the boys, sliding down a steep hill, had one of his legs badly cut by a sharp stone, but came out all right.

The conduct and general behaviour of the pupils has been satisfactory.

Good progress was made in the class room, especially in writing, reading and geography. At the last visit of Mr. E. Bell, our agent, both boys and girls, in their respective class rooms, were examined in reading, writing, spelling, geography, arithmetic and grammar, and they acquitted themselves very creditably, although they were somewhat nervous and excited.

Our brass band, which last summer lost nearly all its members, is again as good as ever. It supplied the music at the dedication of the Indian church of Sugar Cane, by His Lordship Bishop Durien, on the 4th instant. All present, the white people as well as the Indians, were greatly pleased with their performance.

The general occupation of the boys during the summer months has been gardening, milking and helping at the hay; during the winter months, sawing and splitting firewood for the establishment. In the spring all the boys took great delight in preparing the place for the new schoolhouse, in digging the trenches for the stone foundations, in fixing their future new play ground, in planting shrubs and trees in their new garden.

Our master carpenter, Mr. Pourtois, since he started on the new building, took under his charge three of our strongest boys.

The harness shop has been doing well, and although Mr. Horan missed badly some of his ablest boys who left him last summer to go home, he has been able, with the help of his new apprentices, to turn out a good many new saddles and sets of harness, besides a great deal of repairing and mending. Five boys have attended the harness shop.

The progress made in the various branches connected with the girls' department has been very gratifying. The senior girls received training in turn in the kitchen as well as in the dairy, where they learned cooking, baking, butter-making, white cheese-making, &c., whilst the junior girls learned knitting and sewing. All those that were strong enough were also trained in the laundry. A considerable amount of sewing and mending for the boys and the girls has been performed by them in a satisfactory manner.

In conclusion, I may say that, all things considered, we have reason to be satisfied with the results obtained.

I have the honour to be, sir,
Your obedient servant,
J. M. J. LEJACQ, *O.M.I.*,
Principal.

KOOTENAY INDUSTRIAL SCHOOL, B.C., 8th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report for the year ended 30th June, 1895, with a list of government property under my charge.

The health of the pupils has been good, with the exception of a few cases of scrofula, a case of spinal meningitis and one of consumption. All possible attention has been paid to maintain a good sanitary condition among them, which is essential to their progress. They have all been vaccinated.

The conduct and general behaviour in both departments has been satisfactory.

The progress has been in accordance with the application, which indeed was most gratifying. Some of the pupils have considerably improved in writing and speaking the English language, and can express themselves very clearly.

The new programme of studies has been followed, and the pupils have made very good progress in all the branches taught in the class room, especially in arithmetic and composition; they regularly correspond with pupils of other schools of the province.

A few of the children are endowed with good talents for learning; they excel in their class and perform every exercise with accuracy.

The following statement will show how the pupils stand in their studies:—

1st standard	6	pupils.
2nd "	17	"
3rd "	8	"
4th "	14	"
5th "	5	"

Our boys have at divers times been called on as interpreters. On one occasion Gabriel had to interpret for the Indian chief and his people in the court house. The boy was self-possessed and spoke well and audibly before the assembly of whites and Indians. Those present reported him as being a credit to the school.

The whole of the work in the vegetable garden has been done by the boys. They take a great interest in doing their work as perfectly as possible. They have also done the greater part of the ploughing and harrowing on the farm; the ground in cultivation covering this year more than forty acres. A specimen of the beautiful oats raised here was sent to the Indian office, where all who saw it said that it was the best oats in the district.

It being our aim to impart to the Indian boys under our control a practical knowledge of agriculture, as far as the means at our disposal will allow, we purchased last fall a thresher. The boys became greatly interested in running it, and threshed out one thousand, six hundred bushels of oats and one hundred and sixty-six bushels of wheat.

During the past winter the large boys have cut down and hauled logs to fence a piece of land bought at our expense for the purpose of affording them a sufficient practice in agriculture, as the school ground is rather limited.

They have practised carpentry whenever the needs of the school required any work done.

With the assistance of the foreman they have altered certain partitions of their house to give better accommodation. A trench has been dug and pipes laid to let the water out from the laundry and from the kitchen.

In order to promote the health of the children who were accustomed before coming to school to live chiefly on meat, it became necessary to provide a place for keeping meat in summer, as it can be obtained only by getting a large supply; the boys, have, therefore, built an ice house which we find very serviceable.

They have supplied, sawed and corded the firewood for next winter. The smaller boys weed, take in the wood and do many useful things around the premises.

The boys' play ground has been enlarged and attention is paid to their athletic training. As requested by the department, they are taught to sew on buttons and repair their clothes; one of them runs a sewing machine well.

The girls have been exercised in all domestic, laundry and dairy work. The large girls do the baking in turn; they make excellent bread and good pastry. All the cutting and fitting of their clothes have been done by them, also a considerable amount of sewing for the boys. They are also taught gardening. A portion of the garden attached to their play ground has been set apart for that. They raise all kinds of vegetables and display great taste in the arranging of flower beds and walks

We have done our utmost to succeed in having an orchard. Part of the trees planted last year are doing tolerably well, while those previously planted have failed. We are inclined to attribute this failure to the cold nights.

In January we were honoured by a visit from Mr. Vowell, Superintendent of Indian Affairs, who was agreeably surprised at the progress of the children and at the perfect order prevailing every where.

Mr. Galbraith, our agent, pays us a monthly visit.

The interest which he takes in the advancement of the children is a great inducement to urge them on in the performance of their duties.

On a few occasions entertainments have been given by our pupils, who acquitted themselves very creditably of their part.

This spring it had been decided that the Indians should clear, plough and level the streets leading through their village; not being accustomed to that kind of work, they went reluctantly at it; but I am pleased to state that our school boys went with scrapers and ploughs and began the work cheerfully and in good earnest; soon the Indians followed the example of their children.

The work performed gives a better appearance to the place.

I have the honour to be, sir,

Your obedient servant,

N. COCCOLA,
Principal.

KAMLOOPS INDUSTRIAL SCHOOL, B.C., 21st July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended 30th June, 1895.

The attendance during the year has been twenty-five; two boys were discharged and two admitted. The health of the pupils, as usual, has been very good; only one pupil was sick with sore throat for a few days.

Steady progress was made by the pupils in the different branches, but more especially in reading and writing. An examination in all the branches was held during the first week of July, and the result proved that the time of the teacher and the pupils had been profitably spent during the year.

The workshops, which we were authorized to build, have not been erected as yet, owing to circumstances beyond our control; the material only has been purchased. Consequently, regular trade instruction could not be given to the boys; they were chiefly employed in clearing land and gardening. However, some of them had the opportunity to acquire useful knowledge of carpentering, in building an annex, thirty-feet long by eighteen feet wide, and two stories high. This building is a great improvement; the first story is used for laundry purposes; it contains four bath rooms and has a large oven for baking.

A sufficient supply of roots and vegetables was raised after the inundation of last summer; and this spring, a large vegetable garden was prepared; the crop looks exceedingly well.

The most notable event of the year was the visit of Their Excellencies the Governor General and Lady Aberdeen. According to the local paper, the most interesting part of the whole reception took place at the industrial school. The children had been drawn up in a semi-circle to receive the distinguished guests. As they entered, the children struck up a hymn of welcome, to words adapted to the occasion. The walls and ceiling of the schoolroom were most tastefully decorated with evergreens and autumn leaves. The latter, with their bright colours, fastened with pins to the walls in all parts, had an enchanting appearance. Their Excellencies were astonished and delighted with the scene before them, and were well pleased with the address presented by one of the pupils, and with the reading of it, which was admirably done. A short programme of recitations, dialogues and choruses was given, the pupils showing great proficiency and maintaining the best of order.

The progress made by the girls in the various branches of housekeeping has been very gratifying; they are more industrious than the boys. The bigger girls are employed in cooking and baking, and they acquit themselves very creditably. Such work as rag mats, sewing, plain and fancy needle work, darning, knitting, was exhibited at the Kamloops Exhibition held last October; owing to a misunderstanding with the management of the exhibition, no prize was awarded to the school, but the work of the girls was greatly admired by the visitors.

In conclusion, I would say that English alone continues to be spoken by the pupils, and their improvement in pronunciation and elocution is very noticeable.

I have the honour to be, sir,
Your obedient servant,

A. M. CARION,
Principal.

INDUSTRIAL SCHOOL,
ALERT BAY, B. C., 22nd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit an inventory of government property under my charge and to submit the following as my report for the past fiscal year.

The marked increase of the appreciation of the school among both parents and children, compared with that of last year, is the chief point to be noticed. Many have at last realized the value of learning, and during the past year the attendance has increased.

The general improvement of the pupils has been most marked, and the moral behaviour has left nothing to be desired, except in one instance, when the boy was expelled.

In the class room satisfactory progress has been made. The writing, spelling and English is praiseworthy.

Three boys have had lessons in carpentering, and have applied what they have learned in a most useful way. The following articles have been made for the use of the school:—

Two large cupboards, a cot, a blackboard and easel and a flight of steps in front of the school, also a table and two forms for the Girls' Home.

All the pupils work for two hours daily. The younger boys have helped to clear a large piece of ground preparatory for a garden, and all the pupils have helped in the work of the house.

The general health of the boys has been good, with one exception. One of the small boys was ill, his parents insisted on his removal to his home, and, I regret to say, he died two weeks after from acute croupous pneumonia.

I have the honour to be, sir,
Your obedient servant,

A. W. CORKER,
Principal.

INDUSTRIAL SCHOOL, KUPER ISLAND, B. C., 22nd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my annual report for the fiscal year ended 30th June, 1895, together with an inventory of all government property under my charge.

Attendance and Conduct.

This year the number of pupils authorized by the department was thirty, viz.: eighteen boys and twelve girls. The general conduct of the pupils was satisfactory with the exception, however, of three boys who were discharged for truancy and replaced by more desirable pupils.

Instruction.

The half-day system continues to be in vogue and seems to work well. Classes were regularly conducted in the forenoon and afternoon. Good progress was made in

the various branches taught. Up to the present time I have experienced great difficulty in retaining the pupils over a period of three years, and this fact has been a great detriment to the general advancement of the institution.

Health.

Notwithstanding the fact that many Indians of this coast suffer from pulmonary and scrofulous diseases, yet the health in general has been good. I am sorry that I have to record the death of our senior pupil, Simon. On the 12th of May he had an attack of pleurisy and his parents insisted upon treating him at home, where he died on the 18th of May. It is greatly to be regretted that as soon as a pupil gets sick his parents withdraw him from the school and expose him to die from the want of proper nursing.

Farm and Garden.

All the boys receive instruction in farming and gardening, and great improvements have been made in this line. The timber land which was cleared last year has been converted into a garden; the crops look very good and promise to yield sufficiently to supply the institution with fodder, potatoes and vegetables.

Shoemaker's Shop.

This branch continues to be conducted under Mr. J. M. Read, an able instructor, who with the assistance of his six apprentices has supplied the school with boots and shoes.

Girls' Department.

Although most of our female pupils are young, still they have made very good progress. As a rule the girls are more industrious than the boys. They all receive lessons in knitting, sewing, washing, cooking and all kinds of house and kitchen work. At the exhibitions held at Duncan's, Victoria and New Westminster, articles manufactured by the pupils were entered for general competition and twenty-two prizes were awarded to them. With regard to our pupils' exhibits many flattering comments were made in the provincial papers. The *Daily Columbian* of New Westminster had the following reference: "The Kuper Island Industrial School children had a fine display of knitting, crochet, plain work, etc.: a piece of patching work done by a child of thirteen years was almost perfection and the uninitiated eye failed to discover where the patching comes in."

Brass Band.

Our brass band still enjoys the public favour and often dispels the monotony of our small and lonely island, it is also a great factor in giving receptions and public entertainments for the benefit of the pupils and the Indians of the neighbourhood. Last fall our band supplied the music at the reception tendered by the people of Duncan's to His Excellency the Governor General of Canada.

New Buildings.

The new buildings, kindly authorized by Parliament, are now completed. They have greatly improved the general appearance of the school and will, no doubt, be the means of extending its usefulness.

In conclusion I respectfully beg to return my sincere thanks to Mr. Superintendent Vowell and to Mr. Indian Agent Lomas for the wise and efficient efforts they have made to assist me in the management of this institution.

I have the honour to be, sir,
Your obedient servant,
G. DONCKELE, *Principal.*

Department of Indian Affairs.

COWICHAN AGENCY—INDIAN OFFICE,
QUAMICHAN, B.C., 17th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith annual report and tabular statement, the inventory of government property having already been forwarded.

The decrease in the agency has been unusually large during the year. La grippe was prevalent during the spring, and a large number of old people died from the after effects. A number of men go away on the sealing schooners every season, but the loss of the schooner "Earle" with all on board cast a gloom over all. Twenty-six of the crew were Indians of this agency, and have left widows and thirty-four children unprovided for. These families had been depending on sealing for a livelihood and had not cultivated any land.

The crops of hay and grain have been very good, and some families are so well satisfied with their efforts in farming that they do not leave their allotments at all; others still depend entirely on fishing and boat-building for the support of their families. In boat-building some are particularly successful, and as the boats are stronger and better adapted for rough usage in the fishing camps than canoes, they are rapidly taking the place of the latter.

The Industrial school on Kuper Island has continued to work successfully during the year, and, having now been enlarged to double its former capacity, its usefulness will, I believe, be correspondingly increased.

During the year three cases of small-pox occurred, but each case was at once isolated and a strict quarantine observed, and no spread of the disease has taken place. In keeping these cases away from the other Indians, I was well supported by the chiefs and constables.

Small fruits have been supplied to the local markets as formerly, but the demand and prices have been considerably reduced.

The apple crop promises to be good and more Indians are going into fruit-raising each year, and are at last beginning to understand that, if an orchard is to be profitable, it must be cultivated and the trees regularly sprayed; they were notified in the spring that they would be required to spray the trees. Several employed white men to do it with greater or less success, and in future they will endeavour to do the work themselves.

There is, and will be for a time, considerable distress amongst the sick and old who are without relatives to support them. The well paid employment at the saw-mills and hop fields weaned the young men from hunting and the cultivation of the land, and now that these industries are closed to them they have to fall back entirely upon the canneries to obtain sufficient means of support.

There having been considerable competition amongst the salmon canneries for Indian labour, they have resorted to a very unwise policy, viz., to secure the work of certain Indian families they have advanced food for their winter support, to be paid for out of their next season's earnings, this system can only act disastrously to both parties: the Indian having food in his house does not exert himself to obtain a supply of fish or game for winter use, nor is he anxious to engage in other employments; the canner also may find himself left without the help he had been depending on, and have no redress.

The sanitary condition of the several bands of the agency has been fairly satisfactory, and wherever anything likely to prove injurious to health has been observed, it has at once been remedied.

I have the honour to be, sir,
Your obedient servant,
W. H. LOMAS,
Indian Agent.

KOOTENAY INDIAN AGENCY,
FORT STEELE, B.C., 8th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit as follows my report on the condition of the Indians in this agency during the year ended the 30th June.

I also send herewith tabular statement as required by the department, a list of government property was forwarded on the 3rd July.

Whilst the area of land under cultivation is only increased by a few acres of new land being broken, I am pleased to report a marked change for the better in cultivating the soil and putting in the crops, repairing the fences and inclosing new land.

Great improvement is noted in this direction on the Columbia Lake and Shuswap Reserves, and on the St. Mary's, where a new fence has been put up to protect the hay land from trespass by stock.

The Tobacco Plains Band raised an excellent crop of grain and potatoes, but find great difficulty in disposing of the same, their market being Fort Steele, a distance of sixty-five miles by trail, but it is to be hoped that construction will shortly commence on the British Columbia Southern railway, which will give them an opportunity of disposing of their produce at home, as the road will run a few miles from the reserve.

The Flat Bow Band, after the very trying experience of last year of having their crops completely destroyed by the freshet in June, appear not discouraged, and during my visit in May last to their reserve I found them putting in their little gardens, and they have nearly the same area of land under cultivation as heretofore.

The industrial school continues to make satisfactory progress under the care of the Sisters of Charity. The children appear contented and happy, and take a deep interest in their studies, and I find a change for the better in their pronunciation of the English language.

The health of the Indians on the several reserves has been fairly good, considering their tendency to consumption and scrofulous affections. I am glad to be able to report that the "Kootenays" retain their reputation for good conduct, morality and strict sobriety.

I have the honour to be, sir,
Your obedient servant,

R. L. T. GALBRAITH,
Indian Agent.

COQUALEETZA INDUSTRIAL SCHOOL,
CHILLIWACK, B.C., 10th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report respecting the Coqualeetza Industrial School for the year ended 30th June, 1895, as follows. The past year has been one of progress and prosperity. The teaching staff has been doubled in number and now consists of principal, matron, school teacher, sewing teacher, laundress, cook, shoemaker and farming and mechanical instructor. In addition to these we have arranged with a neighbouring blacksmith to give instruction to any appointed to learn that trade.

The attendance of pupils has been as follows:—

	Boys.	Girls.	Total.
1st July, 1894	34	26	60
Entered during year	33	19	52
Total enrolled	67	45	112
Discharged	16	10	26
30th June, 1895	51	35	86
Average attendance	...	...	71

Premising that we use the Ontario Readers, which are more difficult than some others, the standing of the pupils is as follows :—Standard I, 35; II, 22; III, 19; IV, 7; V, 5. Of those discharged 4 were advanced scholars. Some of the pupils have done remarkably well, and upon the whole the progress made has been satisfactory. All the pupils speak English and most of them with a degree of correctness and a freedom from slang phrases seldom found among white children.

The girls have been instructed in all kinds of house work, such as making and mending clothes, cooking, baking, laundry and dairy work in addition to the ordinary school work. Some attention has also been given to music and fancy needle work.

Besides class work the boys have had practical training in farming, gardening, horticulture and the care of live stock. Some of them obtained a limited knowledge of carpentry by assisting at the erection of buildings and fences. The medium sized boys also have taken their turn in doing the work in kitchen, dining rooms, dormitories and laundry. Four of them have been trained as bakers and have supplied excellent bread for the use of teachers and scholars.

The moral conduct of the pupils gave us some difficulty early in the year, but since the expulsion of several seniors, and the reformation of those who remained, there has been a marked improvement, and it is doubtful if any similar school among whites or Indians can show a better record in this respect. In this connection the decision has been come to that no boys over 16 years of age shall be admitted to the institute, unless such exceptional youths as may be well tried and proven moral characters and desirous of fitting themselves for some special usefulness. This decision has been approved both by the department and the missionary society.

Through a kind Providence we have had but little serious illness among the pupils, only one—always delicate—having died at 10 years of age. The prevalence of scrofulous ailments—often hereditary—renders the work of the teachers trying, but through their self-denying efforts the health of those intrusted to their care has been such, when contrasted with the children outside, as to constitute a strong reason for attendance at school, in the minds of parents.

The expenditure for the year has been over $8,500, of which the department paid $2,210. The remainder, with the exception of a few small donations, and amounts received for goods sold, was paid by the missionary society of the Methodist Church.

I have the honour to be, sir,
Your obedient servant,

E. ROBSON,
Principal.

KAMLOOPS-OKANAGAN INDIAN AGENCY,
KAMLOOPS, B. C., 20th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended the 30th June, 1895.

The N-kla-kapm-ah and Shuswap tribes have been fairly prosperous, the demand for their services as herders, freighters and labourers has been equal to former years. Their fur catch and mining operations have been slightly above the average.

The Okanagan tribe had a poor year; they did not harvest more than one-third of the 1893 crop, through drought. In many of their fields, where they had no water to irrigate with, the little grain that came up was left standing, not being worth cutting.

The health through the agency has been good, though the cost of medical attendance has been reduced by only a few dollars. This was on account of a number of surgical operations that had to be performed, caused by accidents.

A number of bands are fencing their reserves, but they are not completed. I have not given credit for the work done in improving their lands in my statement submitted, but expect that in my next there will be a large advance in value of their land improvements.

The number of destitute Indians in this agency is very small, so that the assistance I have given amounts to only $41.50 in the necessaries of life (food) and two ploughs, costing $21 each, to help in their agricultural pursuits.

The Kamloops Industrial School has had another successful year, the advancement made by the pupils being very apparent in all their studies. The parents of the children are very proud of them, and some of the Indians having children of an age to attend have been very jealous. When they were informed that there were to be 25 more pupils admitted to the school, there was universal rejoicing, and more than twice the number of applications were made than could be entertained, some of the disappointed parents having offered to pay to have their children schooled. A ditch has been dug and water been brought on to the ground for irrigating the garden. With only 13 boys, work of this kind has been very slow, and the amount of ground cultivated very small: now with the increased number of pupils the labour can be divided to better advantage and congenial work can be given to each pupil. The grounds and buildings are kept as usual in most excellent order, and the children are always found clean, tidy and cheerful while performing their duties.

The Lytton hospital has this year been quite a success under the excellent management of the nurses, and the prejudices of the Indians to which I referred in my last year's report have been overcome.

I have the honour to be, sir,
Your obedient servant,

WENTWORTH F. WOOD,
Indian Agent.

BRITISH COLUMBIA, BABINE AGENCY,
HAZELTON, 3rd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report for the year ended 30th June, 1895, with accompanying tabular statement; also inventory of al government property in my keeping.

THE KIT-KSUN DIVISION (UPPER SKEENA RIVER).

Kit-wan-gagh Band

numbers one hundred and forty-eight, an increase of two since last year. It has forty-nine log and five frame houses. A nice church has been built here by native labour under the auspices of the Anglican Church Missionary Society. The old one is to be converted into a school-house. These people are very intelligent and prosperous, finding employment at good wages in the canneries of the coast and at chopping cordwood, fishing, hunting and trapping.

There are about twenty-three acres of land under cultivation and two more broken up.

Kit-wan-cool Band

numbers seventy-two, an increase of three, compared with last year. They have twenty-three houses. The Indians invariably abandon this village during the salmon-canning season. A few of the decrepit only remain to weed the garden-patches and look after the interests of those absent; the latter after the termination of their work return to fish hunt and trap.

They have ten acres of land under cultivation and more cleared of bushes.

Kitse-gukla Band

numbers eighty-three, one more than last year. There are twenty-nine houses, nine of which belong to Neio-Kitse-gukla. Fishing, hunting and trapping are the occupations followed.

Ten acres of land under cultivation and more cleared for use next year.

Get-an-max Band (Hazelton)

numbers two hundred and forty-two, an increase of three compared with last year. This number also includes members of other bands, connected by intermarriage, or settled here on account of the advantages offered to earn a more ready livelihood, by finding employment of various kinds, at good wages. The number of the Get-an-max Indians is sixty-seven.

This is the most prosperous of all the Kit-Ksun villages.

There are eleven frame and seventy-three other houses of miscellaneous patterns.

Forty-two acres of land are here under cultivation and five more cleared.

The Indians follow packing into the interior, canoeing, mining, sawing lumber, getting out cordwood and working about the canneries of the coast.

Kits-pioux Band

numbers two hundred and twenty-five, showing an increase of three over the population of last year. Nine frame and forty-one board and log-houses form the village. With the exception of a small number who go to the coast, the remainder are occupied in various ways, packing, mining, chopping, fishing, hunting and trapping.

They have about twenty-one acres of land under cultivation and two more cleared of bushes.

Kits-ge-gaas Band

numbers two hundred and seventy-three, showing a decrease of one compared with last year's count. Few of these people have ever been to the coast. They have very good hunting-grounds and an exceptionally large chain of good beaver lakes and area of swamps, ranging beyond the headwaters of the Skeena River.

There are twelve acres of land cultivated and more broken up.

Gol-Doe Band,

which is the farthest up the Skeena River, numbers forty-four, showing an increase in population of six compared with that of last year. It has a tendency to gradual increase in number, I think. It had been almost decimated by measles, which affliction they tried to overcome by jumping, denuded of all clothing, into banks of snow during a big pot-lach in the month of January, 1887. This mode of treating the measles originated by one finding the rash to disappear.

Quite a number of large decaying houses stand here yet as monuments to the folly.

There are nearly six acres of land cultivated.

Remarks.

The agricultural interests, so far mainly confined to the growing of potatoes only amongst the bands above mentioned, will receive an impetus by the locating of land to individual Indians.

The extraordinary energy displayed by those thus located on the Get-an-max Reserve and the beneficial effect produced, resulted in all the younger members of the Kits-pioux Band wishing to follow that example, to whom I designated for the purpose a very favoured locality, whereon two houses have since been built. The ground I will lay out on the return of those now absent.

The day is not far distant when the people of all the other Kit-Ksun villages will fall into the wake of this movement. The improving of the land given to the Indians, under these circumstances, is much impeded by their necessarily being absent therefrom at times, in order to gain means to further proceed with their work.

The Indians here, of to-day, work hard in every respect to better their condition, especially since I have entirely broken up the old system of an uncle, or next of kin to the children on the mother's side, unconditionally seizing everything belonging to a deceased Indian, leaving widow and children destitute. This same custom, I am gratified to state, is given up by the Hoguel-gets, so much so that only occasionally I am invoked to oppose it.

THE HOGUEL-GET DIVISION.—(BABINE GROUP.)

Morice-town (Sach-al-sop) Band

numbers one hundred and forty-nine, three in excess of the count of last year, and has twenty-four houses and ten acres of land under cultivation.

Hoguel-get Band

numbers one hundred and fifty-three, two in increase of last year, and has thirty-three houses and two acres of land in cultivation.

Fort Babine Band

numbers one hundred and sixty-three, an increase of one over last year, has thirty-eight houses and three acres under cultivation.

Old Fort Babine Band

numbers one hundred and fifty-three, showing an increase of one over last year's count, has thirty-seven houses and cultivates three acres of land.

The above bands followed fishing, hunting and trapping exclusively; their catches in the respective pursuits have been extra good during the year just past.

CARRIER GROUP.

Yucutcee (Portage) Band

numbers twenty-two, nine additional to its population of last year, by two families joining; has four houses and three acres of land under cultivation. The people aside from assisting the portaging of Hudson's Bay Company's goods over the nine miles of land intervening between Babine and Stuart's Lakes, fish, hunt and trap.

Thatce Band

numbers forty, showing an increase of one over last year's count, and has eleven houses and cultivates five acres of land.

Grand Rapids Band

numbers fifteen, four more than last year, has four houses, two acres of land under cultivation, fishes, hunts, and traps.

Tsis-tlain-li Band

numbers fifteen, one less than last year, cultivates four acres of land, has six houses fishes, hunts and traps.

Pintce Band

numbers thirty-five, showing an increase of one over last year's count, has eighteen houses, cultivates three acres of land, fishes, hunts, and traps.

Stuart's Lake (Fort St. James) Band

numbers one hundred and fifty-nine, an increase of four over last year's population, has thirty-two houses and six acres of land under cultivation, does boating about the lakes, packing, fishing, hunting and trapping.

Fort Fraser's Lake Band

numbers fifty-seven, showing a decrease of one since last year, has nine houses, cultivates three acres of land, fishes, hunts and traps.

Stony Creek Band

numbers one hundred and two, a decrease of six in its population since last year, has sixteen houses, and four acres of land under cultivation, fishes, hunts and traps.

Fort George Band

numbers one hundred and twenty-two, three less than last year's count, has twenty-four houses and cultivates two acres of land. In addition to some freight canoeing on the Fraser River, and packing, these Indians fish, hunt and trap.

Tsis-tlatho Band

numbers sixty-eight, showing an increase of three over the number of last year, has nine houses and cultivates two acres of land.

The above bands, with the exception of a few doing some packing and freight canoeing, live by fishing, hunting and trapping. The latter pursuits gave very favourable returns.

Their health has been very good, with the exception of the loss by death through "la grippe," brought in by way of Quesnelle, at Fraser's Lake, Stony Creek and Fort George of four, six and six respectively. The chief of the last named village, David Satye, fell a victim to the disease while on a visit to Stony Creek.

Latest advices from these localities, after the lapse of over a month, lead me to believe that the affliction with fatal results has terminated with the numbers given.

Sikanees.

McLeod's Lake, Fort Grahame and Lake Connelly Bands of Sikanees number ninety-five, ninety-nine and one hundred and nineteen respectively. They are nomadic, live in wigwams, fish, hunt and trap in and about the localities named. Their trapping grounds are very much depleted of fur-bearing animals.

Na-anees.

The Na-anee Bands aggregate in number about one hundred and forty-seven, with a reported increase of three over last year's count. They are semi-nomadic, live in wigwams and roam about the country to the north of Lake Connelly. Their trapping grounds are reported as giving small returns.

Remarks.

The general health of all the bands of Indians within this agency has been very good; with the exception noted above, no epidemic disease or contagion came among them.

The Indians were supplied with the usual amount of medicines and garden seeds—a boon to the sick and needy.

The salmon runs have been very good.

The potato and berry crops proved ample yields.

The proceeds of the fur catch this year have been exceptionally large, owing to the high prices set on fur skins.

The Indians' fears of former years, regarding a possible aggressive policy of the white people towards them, have disappeared. They are content and are striving to better their condition. Their general conduct has been excellent.

I have the honour to be, sir,
Your obedient servant,
R. E. LORING,
Indian Agent.

WEST COAST AGENCY,
ALBERNI, B.C., 6th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR.—I have the honour to forward my annual report to the 30th June with tabular statement and list of government property.

Last season the majority of the sealing schooners with Indian crews made good catches, the "Claoquahts," with schooners "Sapphire" and "Triumph" heading the list. The catches on the coast by schooners this spring were small owing to bad weather, there being little fair weather while the seals were off Barclay Sound the tribes in

that sound speared few seals from shore; but in May and June the Clayoquot Sound Indians and Heshquiahts caught some eight hundred skins from shore, by canoe, for which they were paid $6.00 each at the stores. The Heshquiahts go out sealing twenty miles from shore, two men in small canoes, with bags of sand for ballast, by which means they can carry more sail. This year an agreement was made by the captains and owners of sealing schooners to have a uniform price for skins and standard of payment, also to engage all Indian crews on signed articles, Indians sealing from schooners with their own canoes and gear to receive $3.00 for each skin delivered on board and $20.00 bounty, each canoe with two men, on clearing for Behring Sea (the price given last year was $4.00 a skin.) Most of the Indian sealers have signed on this agreement, and, if it can be carried out with fairness on both sides, it will prevent disputes and trouble.

Last season the captain of the sealing schooner "C. D. Rand" brought his crew of Ewlhuilhlahts back from Sitka as prisoners on charge of mutiny; they were tried at the November Assizes; the outcome of the trial was that the ringleaders underwent a short term of imprisonment and the captain was convicted of giving liquor to Indians, and has lost the command of his schooner. The revolt occurred principally by the mismanagement of the captain, and the course of the schooner before entering Behring Sea not being clearly understood by the Indians when they shipped on board, the captain on leaving Sitka wanted to go to Atu, in the direction of Copper Island on the Russian side, and the Indians wished to make for Sandy Point and stay there until it was time to enter the sea. The absurdity of the captain's charge that he himself and white crew were in danger of their lives from the Indians, was proved by their being engaged for this season's sealing by another schooner before the trial was over. However, it will have a good effect on the West Coast Indian sealers in showing them that the captain is supreme on his own vessel and it is breaking the law to take possession of a vessel and alter her course, even when done without force and with the apparent acquiescence of the captain.

The Presbyterian mission have opened school at Ucluelet, Barclay Sound, on the It-tat-so Reserve, in a house lent by the Indians, who seem very anxious for their children to be taught, the young men also wishing to learn. If the prospects continue encouraging, Mr. Swartout hopes to build a school house in a central position between the two villages, which he thinks will secure a more regular attendance of the young children. The Claoquahts have invested some of their sealing money in lumber, building a row of good frame houses, finished with rustic and painted, to the great improvement of the Opitsat village. On the 2nd of August last year I visited the Norwegian Fishing Company's salting station in Clayoquot Sound, and found a party of Indians, men and women, employed by them, busily engaged in cutting and cleaning fish. This year a salmon cannery is to be started, which will give more employment. Any work which keeps Indians at home is for the well-being of the tribe. The Provincial Government have stationed a constable at Clayoquot with a sloop at his command. This will have a good effect in stopping the liquor traffic along the coast. There are three stores in this sound, and, having a large cash trade with the Indians, they can afford to sell at Victoria prices. The Heshquiaht Roman Catholic mission is progressing. Several nice cottages have been built since last year. Only one death and nine births since my last visit. Stores have been opened for the Indians in Nootka and Nuchatlitz Sounds. The Nootka Indians are improving as sealers, and are earning more money. There is a resident Roman Catholic priest at Kyukaht, and school, with only one quarter's attendance for the past year. The village is situated on two islands, most of the children living on the opposite side to the mission, at Acteese, and it is hard crossing to come to school in bad weather; the Rev. Father proposes to open school at Acteese next fall, when he hopes to secure a better attendance. The Nitinaht school house for the Methodist mission at Cloose is finished, and by a careful expenditure of the $500 granted by the department and help from the Indians in clearing the ground and laying the foundation, &c., a substantial school house has been built and furnished with a good bell and proper desks and seats. The attendance is small at present, but the Rev. Mr. Stone has great faith in the success of the mission. The Nitinahts

have improved in one respect since Mr. Stone's residence among them: there has been little liquor taken there.

At Alberni the contractor for the new Presbyterian Girls' Home has the work well in hand, the basement excavated, frame up and most of the material on the ground. It will be a substantial and commodious building, on a fine site overlooking the river and the Tseshaht Indian Reserve; there are twenty-seven pupils ready to go in as soon as the building is completed. At the day school there has been an average attendance of 19 for the year, the regular attendants and those who have really advanced in their studies being those living at the old Home. I regret to say that the teacher, Miss Minnes, is leaving this term. She was a patient and pains taking teacher and a general favourite with her pupils. The opening of the gold mines at Alberni gives some work to resident Indians.

The early run of Sockeye salmon along the coast was unusually abundant. Halibut and other fish plentiful. General health and condition of the Indians good.

I have the honour to be, sir,
Your obedient servant,

HARRY GUILLOD,
Agent.

INDIAN INDUSTRIAL SCHOOL,
METLAKAHTLA, B.C., 26th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward herewith an inventory of government property, showing all receipts and disbursements for the past fiscal year, with balances remaining on hand; and, also, to submit the following report on the institution under my charge.

The working hours of the pupils, when not in the class room, were occupied in painting the main building, drawing cordwood, coal, and provisions from the beach and wharf, in making and repairing roads, grubbing stumps, shoe mending, domestic, and general fatigue work.

In the absence of a trade instructor, more than the usual time was given to instruction in the class room, and satisfactory progress was made. The educational status of the pupils discharged, and of those remaining in the school at the end of the year was as follows:—six were in the first standard, two in the second, six in the third, nine in the fourth, one in the fifth, and eight in the sixth. The pupils in the lowest standard were, with one exception, new admissions.

The health of the pupils during the year was very good, and the department had not to pay for any medical fees. The conduct of the pupils also was satisfactory.

At a meeting which I attended some time ago in connection with a home for Indian girls, the Venerable Archdeacon Collison spoke very appreciatively of the influence of that home and this institution in cultivating the good opinion of the Indians. I also have frequently noticed the marked change of feeling in bands who told me, when I was looking for pupils with which to start this school: "We have come to an agreement among ourselves not to send any of our children to the school," and, "we mean to keep our children at home if the government will not give us back our country, of which we have been despoiled by the whites." Now that has given place to a much better state of feeling, to more appreciative ideas.

But still at the Queen Charlotte Islands, and other distant parts of the agency, there seem to be but few who are disposed to take advantage of the opportunities which they have of sending their sons to this school, the reason being that if

the boys were sent here, their parents could very seldom see them. Indians are very much attached to their children. There are seemingly very few cases of child desertion among them.

I have again to thank Dr. Vernon Ardagh and the ladies connected with the Church Missionary Society for their kind instruction of the pupils in the Sunday School.

I have the honour to be, sir,
Your obedient servant,
JOHN R. SCOTT,
Principal.

INDIAN OFFICE, FRASER RIVER AGENCY,
NEW WESTMINSTER, B.C., 1st August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report with tabular statement for the year ended 30th June, 1895.

List of government property in my charge was forwarded on the 5th July.

The year just ended has been rather an unfortunate one for the Indians residing on the Lower Fraser, in this agency.

Owing to the high water in the Fraser River last summer nearly all their crops were destroyed and a great portion of their fences washed away, which was a very serious loss and discouraged them very much.

A few Indians residing on each reserve who are more intelligent than other members of their respective bands set to work immediately after the floods had subsided and repaired their fences and planted some potatoes, barley and millet. The potatoes yielded fairly well; but the barley did not ripen, and was cut green and used for fodder.

The assistance rendered by the department in furnishing hay for cattle and horses belonging to those Indians whose hay crop was destroyed by reason of their fences having been washed away was very much appreciated by the Indians and it was most certain that only for the timely aid rendered, many of their stock would have perished during the winter. The following are a list of reserves that suffered most severely from the floods, viz.: Hope, Skaw-ah-looks, Ohamil, Squatits, Chehalis, Scowlitz, Sumass, Skweahm, Nicomen, Skwah, Aitchelitch, Kwan Kwan-apilt, Skway, Squiahla, Langley, Kaitsey, Coquitlam, and New Westminster.

As the fishing season was about to commence when the floods had subsided, most of the Indians left for the canneries, and did not return to their reserves until late in the fall, having gone to the hop fields to work after the canneries closed. In this manner most of them earned sufficient to keep them during the winter. A number of old Indians and some of those who were sick called on me for relief and medical attendance from time to time, which I rendered, first satisfying myself that the applicants were in destitute circumstances.

The Indians residing at Ho-mal-ko, Klahoose, Sliammon, Sechelt, and Skwawamish, did not suffer any loss through the floods, and were able to live comfortably. These Indians depend chiefly on logging, hunting and fishing for their living. I have impressed upon them the advisability of their getting more ground cleared and cultivated, as hunting and fishing will become a more precarious livelihood year after year.

There is a reduction of 98 in the total number of Indians in this agency since sending in my last report. This reduction was not caused by an unusual number of

deaths during the past year, but is owing chiefly to the fact that I have been able to obtain a more accurate census. (It is most difficult to obtain a correct census of Indians scattered over a large area such as the Fraser Agency.)

There has been no contagious disease among the Indians under my charge during the past year, although a good deal of sickness has existed, chiefly la grippe, pneumonia and consumption.

I have had no difficulty in getting them to keep their premises in a clean and sanitary condition, as they realize the benefits to be derived from cleanliness.

The three schools in this agency, viz.: All Hallows, St. Mary's Mission and Coqualeetza Institute, have each been well attended, and are doing an excellent work for the Indian youth of this district. Too much praise cannot be given to those in charge of these schools for the attention and care bestowed on the children attending them. The pupils as a whole are making good progress with their studies.

I have the honour to be, sir,
Your obedient servant,

FRANK DEVLIN,
Indian Agent.

WILLIAMS LAKE AGENCY,
CLINTON, B.C., 22nd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to inclose my annual report and tabular statement for the year ended 30th June, 1895, together with a list of government property in my charge at that date.

The Indians throughout the agency have had a fairly prosperous year. They raised good crops, and a great number of the able-bodied men find employment as packers, miners and farm hands.

Quite a number of the men of the Anderson Lake and Bridge River Reserves are engaged in gold mining, and doing well.

I regret to report that a few of the reserves show a decrease in population, the deaths being mostly children, from colds, as there has been no epidemic amongst the Indians of this agency. I have also to report the death of the chief of the Aneham Reserve. He was a very old man and much respected by whites and Indians, and ruled his band with a firm hand.

Great improvements are going on in the way of dwelling houses at nearly all the reserves, and some very comfortable buildings are being erected. Four new churches are being built, at each of the following reserves, viz.:—Alkali Lake, Kenim Lake, Stones and Williams Lake.

The children of the Williams Lake Industrial School, under the able management of the Rev. Father Lejacq, show a marked improvement in their studies since my last report. The rooms belonging to the institution are kept in excellent order.

The general conduct of the Indians has been good.

Relief was given to all sick and destitute during the year.

I have the honour to be, sir,
Your obedient servant,

E. BELL,
Indian Agent.

NORTH-WEST COAST INDIAN AGENCY,
METLAKATLA, B. C., 28th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, tabular statement and list of government property under my charge for the year ended 30th June, 1895.

There having been no epidemic disease of any kind amongst the Indians of this agency during this fiscal year, the mortality amongst them has been less than usual, hence an increase in the total population.

The Tallion nation and the Haida nation are gradually diminishing in numbers through the effects of scrofulous diseases contracted by them many years ago.

The Haida bands were forty-five years ago the dominant tribe of Indians of the Pacific Coast of North America, being both physically and mentally superior to all other Indian tribes. Now the Haida nation is amongst the weakest.

Edenshaw, the greatest and best Haida chief, died of old age this year.

He was an intelligent and worthy old Indian chief, and held many written papers of praise and recommendation signed by the officers of war vessels, merchant ships, and the Hudson's Bay Company of early times.

Chief Edenshaw and his people have been friendly and helpful to white men from the earliest arrival of white men at Queen Charlotte Islands.

The sanitary condition of the Indians of this agency is improving yearly.

The Tsimpsean nation, the Haida nation, the Nishgar and the villages of Kitimatt and Bella-Bella, of the Oweekayno nation, are deserving of all praise for their successful efforts in emulating their white neighbours in their manner of living and house-keeping.

The nations thus mentioned form fully nine-tenths of the Indian population of this agency.

The Indians are fairly well off, although the year's earnings at the salmon canneries were not large, and the earnings of Indians usually engaged in the lumber business fell off greatly through the depression in the lumber trade, and notwithstanding the almost total extinction of the canoe freighting business on the Skeena River owing to the continued success of the river steamer "Caledonia," which carries in six days as much freight as formerly required the services of two hundred Indians and forty canoes for eighteen days, earning at least $4,500.

There has, however, been an increase in the fur catch by Indians this year, which with the high price of furs has helped the Indians very materially.

I am pleased to record the fact that the small earnings of Indians at white men's industries had the effect of starting them into an extra effort to secure more than usual of dried fish for winter use so that, although the Indians had not the means to purchase the usual quantity of white men's food, there has been no real scarcity, and I distributed less than half the amount of some former years for the support of destitute Indians.

The supply of free medicines to Indians of this agency has been greatly reduced this year: together with the doctors and missionaries, I have been continually instructing the Indians that those of them who are able to pay for medicines are expected (like white people) to look after themselves in that respect.

The absence of any epidemic disease this year has helped us greatly in reducing the quantity of drugs used.

The village sites of Fort Simpson and Bella-Bella have become too small for the increasing populations of the villages and a greater area is required for more modern buildings and streets.

These village sites may be readily enlarged by additional surveys of the adjacent timber lands.

The boarding schools and day schools for Indian children throughout thi agency are still prospering, and the various missionaries are labouring continuously for the improvement of the Indians.

The departmental steamer "Vigilant" having been thoroughly repaired last spring is in good order and even more efficient than when quite new.

There is peace and quietness throughout this agency.

I have the honour to be, sir,
Your obedient servant,
C. TODD,
Indian Agent.

NORTHERN SUPERINTENDENCY, ONTARIO—1ST DIVISION.
INDIAN OFFICE, MANITOWANING, 13th September, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report and tabular statement with statistics of the Indians under my charge for the year ended 30th June, 1895.

I am pleased to say that the Indians have in all cases complied with the instructions given them last spring in regard to sanitary matters, and have in all cases cleaned up their premises and otherwise shown a marked improvement in their mode of living.

The Thessalon River Band numbers one hundred and seventy-eight; they are mostly fishermen and pay but little attention to farming, yet a number of them work in the lumber shanties in the winter, and some at the saw-mills in the summer season.

The Maganettawan Band numbers one hundred and eighty-nine. They mostly live at West Bay, on the Manitoulin Island, where they have good farms and gardens, and are what might be called very prosperous. Some of the Indians, however, work in the lumber camps in the winter, and load vessels in the summer. I visited the reserve this summer and found only five families who reside permanently there and they seem to be in comfortable circumstances and have medium good farms and crops.

The Spanish River Band numbers six hundred and nineteen, and is divided into three divisions. The first reside at Sagamook, on the Spanish River Reserve. The second live on the reserve on the left bank of the Spanish River and at Pogumasing and Biscotasing. The third reside on the Manitoulin Island. They are industrious, and find employment at the different saw-mills on the north shore and on the island.

The Whitefish Lake Band numbers one hundred and thirty. These Indians complain of the scarcity of game and furs, and that their hunting is not remunerative. Many of them find employment as guides. Some work on the Canadian Pacific Railway, and others in saw-mills and lumber camps.

The Ojibways of Mississauga River numbers one hundred and sixty-one. They are in fair circumstances, and are good citizens. They complain of the scarcity of fur and game. They do not farm extensively, but the members of the band work at lumbering in the shanties. They have a good school in the village, and are intelligent. During the past summer they obtained $200 from the department, which was laid out on the road running through their reserve from the Mississauga to Blind River. The work was all done by the Indians in a very creditable manner, and highly spoken of by people travelling over the road.

The French River Band numbers eighty-four. The most of them reside at Sheguiandah, on the Manitoulin Island, where they have small farms and are comfortable, and they are all industrious and steady.

The Whitefish River Band numbers eighty-nine. They farm but little. They work in getting out timber, and some of them work in the saw-mills. They have a good school under the auspices of the Church of England, and are a very intelligent, steady and sober lot of Indians.

The Serpent River Band numbers one hundred and sixteen. These Indians find employment in the different saw-mills in the vicinity, and are doing well. They also have a very good school, which is well attended.

The Tahgaiwinini Band numbers one hundred and fifty-one. They farm and fish chiefly, but some of them work in lumber camps, and as a general rule they seem to be prosperous.

Point Grondin Band numbers forty-seven. I visited this reserve, but there are only five families who reside permanently on the reserve. They have no school in their village. The members of the band fish during the summer and work in lumber camps in winter.

The Indians of Manitoulin Island "unceded."

This band numbers eleven hundred and thirty-six. They are industrious and hard-working Indians; are good farmers and fishermen, and during last winter they took out over one hundred thousand ties, which the department sold for their benefit at a good price. Bush fires have this season destroyed a large quantity of timber on this reserve.

The Ojibways and Ottawas of the Manitoulin Island.

The Cockburn Island Band numbers forty-four. They are industrious and steady. They do not farm much, but find work the year round with Hitchcock & Foster, the licensees of the timber limit.

The Sheshegwaning Band numbers one hundred and sixty. They are good farmers and hard-working. During the past winter they made about seventeen thousand ties, which the department sold for them at good prices. There are a number of very nice houses in this village, and a good school.

The West Bay Band numbers two hundred and sixty-three. They are successfull farmers, and are well-to-do. They have a fine church and a fair school house, both of which are under the auspices of the Catholic Church at Wikwemikong, and are well attended. The department granted $250 to be laid out upon the roads on this reserve during the past summer. The work was done by the Indians, under the superintendency of Mr. William Vinew, who reports the Indians as good workers. I notice Mr. Bowson, the reeve of the township of Billings, speaks very highly of work done on the reserve.

The Sucker Creek Band numbers one hundred and nine. They are good farmers and well-to-do. They have a church and school house, under the auspices of the Church of England, both of which are well attended. The department also granted this band $175 for the improvement of the roads in their reserve, which was laid out under the supervision of Mr. W. J. Mills, who reports the Indians as good workers, and that a good job has been done.

The Sheguiandah Band numbers one hundred and fifty-two. The Indians farm chiefly for a living, and in winter work out in lumber camps. They have a church and school house under the auspices of the Church of England, and are very thrifty. The department also granted this band $250 this season to repair the old government road running through their reserve. The money was laid out under the management of Mr. James Lewis, who reports that the Indians have done all the work in a very satisfactory manner, and made a good job of it.

South Bay Band numbers seventy-four. They fish and farm successfully, and are steady Indians. Their church and school are both under the Wikwemikong missionaries.

Sucker Lake Band numbers twenty-five. They appear to be prosperous and contented.

The Obidgewongs of Lake Wolsey number twenty-two. They farm and fish in summer, and in winter work in lumber camps.

There are nineteen schools in operation in this division, all of which are fairly well attended. The children as a general rule are well clad, clean, tidy and respectable. During the present year I have, under the instructions of the department, elected chiefs under the new regulations, at South Bay, West Bay, Wikwemikongsing, Sheguiandah, Sucker Creek, Whitefish River, Whitefish Lake, Sagamook, Serpent River, Mississauga River, Thessalon and Point Grondin, each to hold office for three years from the first day of July last past.

I may say that the whole of the Indian population are apparently happy, contented and industrious.

I have the honour to be, sir,
Your most obedient servant,

B. W. ROSS,
Indian Superintendent.

KWAWKEWLTH AGENCY,
INDIAN OFFICE, ALERT BAY, B. C., 27th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to embody herein my annual report, and to inclose tabular statement for the fiscal year ended 30th June, 1895.

The health of the Indians of this agency for the period embraced in this report has been, on the whole, very satisfactory; the sickness wherever occurring being confined principally to the old and infirm amongst the various bands. The winter of 1894-95 having been a very mild one, much less suffering than is usual was endured by those of the aborigines who are, from old age and sickness, ill-prepared to endure the severity of a protracted cold spell. When the Indians can be induced to substitute smaller and more comfortably built houses for the present large ones, the various ailments in the way of coughs, colds, &c., with which many of them suffer, should, it is thought, to a great extent disappear.

In a few of the villages of this agency, at Alert Bay, Ma-ma-lil-li Kulla and Cape Mudge, and one or two others, a few small cottages of from one to three rooms each have been erected, and it is expected that many of the Indians of the villages mentioned, as well as those of other bands, will be induced to emulate the example set by their more progressive neighbours.

The salmon fishery establishment on the Fraser River, to which some of the Indians of this agency resort during the summer months, did not, in consequence of scarcity of fish, secure even a fair pack of canned salmon, and as a result the earnings of the Indians were not at all remunerative. In the northern portion of the agency, the earnings of the natives were much larger, the average of the individual being about $50 for the season, lasting about a month. In former years nearly the entire work at the canneries was, with the exception of a few Chinese employed, monopolized by the Indians; but the advent of the Japanese and others in later years, has to some extent lessened the earnings of those Indians engaged in the prosecution of that industry. For food, sufficient fish was, however, had for the demands of the Indians for their winter consumption, and the supply of berries was exceptionally good.

During the year the attendance at the Alert Bay Industrial School increased considerably, and the children being educated there seemed contented; and their health was good. Every effort is being made by Mr. and Mrs. Corker to further the work of the institution, and before long it is hoped that the full complement o thirty-five scholars shall have been attained. Monthly reports of the various schools

in my agency, both industrial and day, have been forwarded to the department. Three Indian day schools have been in operation during the year, and increased interest in school work generally is apparently shown by the adult Indians, who are beginning to realize the necessity and value of an education for their offspring.

As heretofore, the great drawback to the success of day schools is the want of regular attendance on the part of the pupils. As the parents leave their homes to seek work at the various fisheries and elsewhere, it becomes necessary for many of them to take with them their children, thus leaving so few pupils behind that the work of the schools is seriously affected, and the results of the teachers' labours are not as apparent as they otherwise would be were the pupils to attend regularly to their studies.

In addition to the employment found by some of the Indians at the salmon canneries and elsewhere, a few of the others have recently employed themselves in hand-logging, the product of their labours being disposed of to the various saw-mills at Vancouver and its vicinity. Those engaged in this vocation are, generally speaking, of an energetic turn of mind, and work early and late to accomplish more than ordinary results, in order that their monetary returns for the season's labour may be as large as possible. With an advance in the price of logs, which is confidently looked forward to, many of the other Indians may be induced to engage in this pursuit.

Very little has been done during the year by the Indians in the way of agriculture, even in the localities where the soil of the reserve is capable of cultivation, except on the reserve at Cape Mudge, where more has been done than ever before. It is, however, gratifying to observe that in a few instances a number of pigs, apparently well bred animals, have been introduced, and from these a few litters of young pigs are being raised, and a profitable disposition can be made by selling their surplus to the white settlers and others of the neighbourhood who may be in need of such animals to stock their new homesteads.

The girls' home at Alert Bay, conducted by Miss Dowly, under the auspices of the Church Missionary Society, has been quite successful. There are thirteen girls in the home, and several fresh applications have had to be refused for want of accommodation and for lack of funds to carry on the work. The Rev. A. J. and Mrs. Hall have been indefatigable in their efforts to make the work of the mission a success, and have had good encouragement in this respect, several marriages having taken place in the mission church. The improvement is slow and hardly perceptable to an outsider, but there is encouragement enough to hope that something may yet be done with these people, who are much less advanced than any on the coast.

I have the honour to be, sir,
Your obedient servant,

R. H. PIDCOCK,
Indian Agent.

INDIAN LANDS AGENCY—3RD NORTHERN DIVISION,
SAULT STE. MARIE, 13th September, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement on Indian affairs in my agency for the year ended 30th June, 1895.

Garden River Band.

There is very little change in the band since last year's report in point of numbers, a falling off of two of the total of the band. There were fifteen deaths, mostly

children and a few of the old members; against these there were nine births, the difference of six was made up in marriages and emigration.

No disease of a contagious kind appeared on the reserve. The houses have been kept clean and the approaches. As I have before stated, the members of this band are not farmers, they only raise potatoes, and the crop turned out a great deal better than expected, an increase of about twelve hundred bushels over last year, and owing to the late rain a good crop is looked for this fall. Of other produce they raise very little.

The hay crop has fallen off greatly during the last few years, though last year shows an improvement of about fifty-one tons. The land is very sandy, and, unless there is a wet season, the grass crop is always poor. This year the grasshoppers were very numerous.

These Indians depend a good deal on the berries picked during the summer months, and this year they were almost a failure owing to the late frost. Where hundreds of bushels were picked last year, this year there were very few, and many had to go to the American side in order to find them. The price they get per bushel is from $1.50; in a good season some families will pick as many as seven bushels per day.

The sugar making is also falling off greatly, the season for the running of the sap having been so unfavourable.

During the winter some of the band did very well in cutting pulp wood and ties and labouring in the lumber camps on and round the reserve.

The schools this year have been doing a great deal better, especially the Catholic school, which has had as many as fifty-eight children in one day. The Protestant school has not done so well, there being fewer Protestant children in the band. Both schools have been kept clean and in good order. The great trouble is that the parents do not send the children regularly; they are kept at home on the most trifling causes and then again are away for weeks during the sugar-making and berry picking seasons.

The Tagoma Water Power Co. here offered sugar beet seed and prizes to any Indians who would plant and grow one-eighth of an acre. Some twelve of them took the seed and made the attempt, but so far as I have learned all turned out a failure. This was in part owing to the late arrival of the seed, which came from Germany, and the want of rain in the early part of the season.

I tried to induce the Indians to get up an agricultural show this fall, but failed. I may be more fortunate next year, as many of them think it would be a very good thing.

The band is composed of Church of England and Roman Catholics; the latter predominate. Each denomination has a church and school house. There is also a Methodist church, but no minister.

Chief Pequetchenene is chief of the band by election, and the four sub-chiefs, Jacob Waikemah, John Askin, Jarvis Augustin and John Augustin, compose the Council.

I may mention in regard to the reserve, that the St. Mary's River is making serious inroad on the bank, several feet being carried away each spring.

Very little land has been sold this year to settlers, most of the best land having been taken up.

Batchewana Band.

Chief Nubenagooching is a life chief and now well up in years; he resides in the bay on the Garden River Reserve with a large number of his band, who settled there at the time of the Pennefather Treaty. They raise potatoes, corn, pease and oats. They have only a small reserve of their own of about twenty-three acres, an island at the St. Mary's Rapids, which will, no doubt, be very valuable some day. At present it is only used by a few, as a fishing station. The rest of the band live at Goulais Bay, Batchewana and the Lizard Islands, where they earn a livelihood by hunting, fishing, getting out wood for tugs, and ice, in the winter, for the use of the fishermen. Some of these Indians own land of their own, purchased from the department, in the

townships of Kars, Fenwick, Dennis and Herrick, where they farm to a small extent. They all appear well contented. They have two Catholic churches of their own, one at Goulais Bay and one at Batchewana; they are mostly Roman Catholic, with a few Methodists. I visit these latter only once a year, in paying the Robinson Treaty money, when I distribute blankets and tobacco and give them supplies.

Big Head, Michipicoten River.

This band is only visited by me once a year at the time I pay Robinson Treaty money, and, heretofore, at Michipicoten River I have met a very few Indians, most of the money being left with the officer of the Hudson Bay Company's post, according to instructions. This year it was quite different; on my arrival I was met by about sixty Indians, who came from Chapleau and Missinabie. They all appeared well-to-do. I paid them, gave them tobacco and a good feed, which was thoroughly appreciated by them, after which a short council was held by Chief Jambetta, and they returned to Chapleau, stating that they would again come down next year.

The following day I entertained and paid the Indians of the river and those from some of the inland posts; afterwards I visited the reserve up the river and found all the houses vacant except that of Chief Legard, who was there with his young grandson. He informed me that only about four families lived there during the year, there being little or nothing to do. I told him that I regretted the falling off in their gardens, which at present show only a few potatoes, carrots, and a little Indian corn and cabbage, the whole amounting to a mere nothing. He said that it was no use raising any more than could be consumed before winter, else the balance would be destroyed by frost, most of the Indians being absent.

Some of them have been doing very well in the fishing business; two boats caught as much as twenty-two tons during the spring. The hunters of the band did better this year with furs. On the whole I think they are a very contented people; like most Indians, they are always wanting some assistance.

This band, which last year was composed of Roman Catholics and Methodists, is now Roman Catholic and Church of England.

I visited the Roman Catholic school house, which has been rebuilt by one John Schillan, and found the work had been well done. Whether the school will open I am not in a position to say. I have the impression that the Hudson Bay Company's post will soon be closed, and then there will be no inducement for the Indians to remain, nothing being left but the fishing station at Gros Cap.

Shingwauk Home for Boys.

Before closing my report I must say a few words regarding the Shingwauk Home for boys in the town of Sault Ste Marie, now under the management of Principal George Ley King. I visit this institution every month, and find that during that gentleman's management very great improvements have been made. The inside of the institution has been entirely re-modelled and a number of cupboards and partitions have been taken down, thereby giving a greater amount of room, more light and better ventilation.

The water supply is very good, being brought from the river in pipes to a large tank in the building, which affords great protection against fire, and supplies the bath room with both hot and cold water for the use of the boys.

The bedrooms are all kept clean and neat, new bedsteads are certainly required and I believe that a grant has been made for this purpose: the present wooden bedsteads have been in use for over twenty years. Everything is conducted in a very satisfactory manner.

The meals are very good, and any Indian child getting into this institution may consider himself well off and well cared for, for a more happy and contented lot I have not seen, especially the younger ones, who are well looked after by Mrs. King, the wife of the principal.

There are now in the home sixty-five boys and two little orphan Indian girls, two and four years old, who are kept as special wards of the department. Besides general schooling, the boys are taught various trades, carpentering, tailoring, boot-making and weaving, in which they take great interest, and are as a rule making very satisfactory progress.

On all my visits I have found the school department doing very well. Since Mr. King's advent he has been very fortunate in having little or no sickness among the pupils under his charge.

I have the honour to be, sir,
Your obedient servant,
WM. VAN ABBOTT,
Indian Agent.

DISTRICT OF SASKATCHEWAN, N.W.T.
CARLTON AGENCY, TREATY No. 6, 23rd July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my eleventh annual report, tabular statement and inventory of government property under my charge for the year ended 30th June, 1895.

William Twatt's Band, No. 101.

The sowing of this band was: wheat, thirty-seven bushels; oats, thirty-one; barley, twelve, and potatoes, seventy-five. They harvested: wheat, one hundred and ninety; oats, ninety; barley, ninety, and potatoes, four hundred and forty-three bushels. They stacked two hundred and fifty-two tons of hay, broke twelve acres of new land and summer-fallowed six acres. A portion of ten acres of the oat crop proving a total failure was ploughed up. About half the gardens, being well attended to, gave a very fair return.

In winter most of the band went off hunting. Those who remained attended to their cattle (horses sixty, cattle ninety-six), which came out in fine condition, took out timber for two houses and three stables, supplied the lumbermen with hay, hauled lime-stone for two kilns and took out fencing sufficient to inclose twenty-two acres. The building logs were used in replacing old houses with new and larger buildings. In this way they are gradually obtaining a better class of houses. These people having until very lately made a good living by hunting, are still very poor farmers, but the instruction of an Indian farmer living permanently on the reserve is beginning to show results, especially in the better working and fencing of fields.

Petequakey's Band, No. 102.

This band sowed:—wheat, sixty-six; oats, twenty-one; barley, twenty-one, and potatoes, thirty-five bushels. The grain crop was a total failure, drought and gophers having destroyed it all. They harvested one hundred and nine bushels of potatoes and put up two hundred and forty tons of hay. The loss of crop is more to be regretted, as there was a great improvement during the year in the amount of work performed by these Indians. They broke ten acres of new land, summer-fallowed forty-five acres, and ploughed under forty-seven acres of the crop that failed. Two new houses and five stables have replaced old ones, all their houses are now floored with lumber, and all but three have shingled roofs. Several of

the men made furniture for themselves, so that now all have bedsteads, tables and chairs. In the winter they took out eighty shingle logs, seventy-one saw-logs and two hundred and fifty flatted building logs, with fencing for twenty-one acres, newly inclosed, and for necessary repairs. All their stables have been fitted with stanchions, four sets of bob-sleighs were made, and their logs when sawn yielded them nine thousand feet of lumber and fifty thousand shingles. Mr. Farmer Couture is to be congratulated on the improvement effected in a band which has always been regarded as notoriously lazy.

The cattle, numbering eleven horses and seventy-one horned stock, have been well cared for and are in good condition.

Mistawasis Band, No. 103.

On this reserve there were sown: wheat, one hundred and eighty bushels; oats, twenty-nine; barley, twenty; and potatoes, sixty-two bushels. The crop suffered much from drought, and was harvested with the following unsatisfactory result: wheat, three hundred and fifty-eight bushels; oats, ninety-five; barley, thirty-eight; and potatoes, three hundred and eighty-five bushels. Six hundred and thirty-five tons of hay were stacked in very good condition, and the crop of calves will be fair. Four new houses and six stables were erected and fencing for sixty acres and for repairs was cut and placed in position.

Sixteen acres of new land were broken, forty-five acres were summer-fallowed, and fifty-seven acres of old fallow-land were ploughed in the fall. I cannot claim that this band has advanced much during the year. The laziness of the women, who should give far more attention to butter-making and the care of gardens, has been always a drawback. I draw some encouragement from the facts that at last the Indians have been induced to give up their wasteful habits of leaving hay in cock for an indefinite period, and that the last new house erected is a very creditable structure of good size and with a convenient upper story.

Ah-tah-ha-koop's Band, No. 104.

Much better results in every way are shown by this band, which sowed: wheat, two hundred and eighty; oats, eighty-five; barley, thirty-eight; and potatoes, fifty-eight bushels; and harvested: wheat, eight hundred and sixty-nine; oats, four hundred and four; barley, two hundred and twenty-three, and potatoes, three hundred and ninety-five bushels. This reserve also suffered severely from drought, but better culture here resulted in a crop fifty per cent better than on Mistawasis Reserve. Seven hundred and sixty-one tons of hay were stacked, and the live stock —three hundred and twenty-four head, exclusive of forty-seven horses—were well cared for and are in excellent condition. Five new houses and eight stables have replaced old ones. Two hundred and thirty saw-logs were hauled to mill. New fencing has been built round seventy-five acres. Seventy-one acres were summer-fallowed, forty-three acres broken and sixty-five acres were ploughed in fall. Some of the gardens were well attended to and gave excellent results; in other cases neglect was followed by poor results. Cows on this reserve are regularly milked, but the amount of butter made is still much less than it should be.

Further improvements in buildings are being made, material for which is plentiful, the band's share of lumber cut by our saw-mill during the year being 47,000 feet.

Kapahawekenum's Band, No. 105.

This band supports itself entirely by hunting and fishing. No farming is done on the reserve.

Keeneemootayo's Band, No. 106.

These people are settled partly at Stony Lake, partly at Whitefish Lake. They are in possession of eight head of cattle, and put in sixteen bushels of potatoes, from which they harvested forty bushels, having consumed largely during the summer. They put up fifty tons of hay for their stock, which are in good condition. They support themselves by hunting and fishing.

Pelican Lake Indians.

These people are scattered from Pelican Lake to Whitefish Lake, and live by hunting and fishing.

Wah-spa-ton Sioux, No. 94a.

These Indians are newly settled on a reserve of four sections of land at the Round Plain, near Prince Albert. They put in thirty bushels of potatoes, from which they harvested two hundred bushels. They cut and stacked one hundred and ten tons of hay, mostly for sale, as they hold only four oxen. They have broken twenty acres of new land, and have put up one house and seven stables. During the winter these Indians cut sufficient fencing to inclose the twenty acres, and cut and hauled building logs besides. These Indians are very industrious, and support themselves by working for the farmers and people of Prince Albert.

General Remarks.

The health of the Indians in this district has during the year been exceptionally good. Scrofula, though still too prevalent, appears to be decreasing, and few new cases of sickness have occurred. Such illnesses and deaths as have happened have nearly all arisen from diseases of long standing. A decided improvement in personal cleanliness and increased care bestowed on houses have largely lessened the dirt, which has been a principal cause of sickness.

Much has been done during the past year to improve the dwellings of the Indians. A few have built new houses; others have substituted shingle roofs for thatch, and provided for some sleeping room upstairs—a change from the use of one room in common and for all purposes which makes for both cleanliness and decency, for which reason I consider that the provision of a second room should always be an object to be aimed at when making arrangements for house accommodation for these people. A number of these people have made beds, chairs and tables for themselves, besides many of the simpler agricultural implements. All this has had the effect of making them take some pride in their surroundings, the more so as these are largely the work of their own hands, and I confidently look forward to further improvements arising from this feeling in those who have already commenced to improve and from the force of example in other cases.

The Indians under my charge are quiet, peaceable and law-abiding. The attendance at the houses of worship is large and regular.

The schools on the reserve are well conducted, and the attendance of the children who reside within reasonable distance is good. During the year a number of the children have been sent to industrial schools and to the new boarding school at Duck Lake. So many were taken from Petequakey's Reserve that it has been found necessary to close the school on that reserve. On the other hand, a teacher has, after much trouble and delay, been procured for Kapahawekenum's Reserve, and the school has been re-opened. Inclusive of the Sioux school and that at Ile à la Crosse, there are now six day schools in this district.

There are at this date five hundred and twenty-five acres under crop, a considerable portion of which is either in new breaking or land which was summer-fallowed last season, and the matter of providing clean land for next year's crop is now receiving attention. It is not encouraging to remark that in many cases land

which was summer-fallowed last year is much more weedy than it should be, but the continued dry weather checked the grain, giving the weeds opportunity to spread. The crops on Ah-tah-ka-koop's and William Twatt's Reserves promise well; that on Petequakey's has again been entirely destroyed by gophers, while on Mistawasis a small crop may be expected.

The government buildings have received some improvement during the year, including a new house for the interpreter, a root-house, a farm stable at Sturgeon Lake, several improvements in school buildings, and a general painting of roofs.

The crop being small, I did not run our grist-mill, as I found that it would be less expensive to send those who had grists to the Prince Albert mill.

The saw-mill ran until the condition of the boiler made it impossible to saw. A new boiler having been provided, work has been resumed, and we are now sawing for Mistawasis' Band, having finished forty-seven thousand feet for Ah-tah-ka-koop's Band.

In conclusion, I beg to state with pleasure that the employees of this district have worked well and faithfully, and have performed their duties to my entire satisfaction.

I have the honour to be, sir,
Your obedient servant,

HILTON KEITH,
Indian Agent.

ST. JOSEPH'S INDUSTRIAL SCHOOL,
DUNBOW, ALTA., August 30th, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year 1894-95, together with inventory of government property in my charge on the 30th June last.

Attendance.

The authorized number of pupils was one hundred and twenty; this number was filled on the roll, twelve boys and seven girls being admitted during the year. Many applications had to be refused until the new addition to the boys' building had been put up.

The following pupils have been entered in the discharge book: one on account of very poor health was allowed to go home; three went up north to attend a school near their own reserve; two being old and advanced enough were authorized to go and help their aged parents; one was placed out on service.

Not a great many pupils worked at outside service, as times were dull and money scarce.

Staff.

The staff has remained the same as the preceding years, with the following change, Farming Instructor J. Meehan has been replaced by Thos. Morkin; the matron having been removed, the Rev. Sister Malchelosse filled the position.

Improvements.

A new wagon shed has been built. According to the testimony of outsiders, it is a most sensible building, as it teaches them as well as the pupils the care to

be taken of wagons, rigs, implements, etc., in all seasons, and this improvement is certainly a great economy.

A coal shed has been constructed for hard coal; as this coal up to then was lying on the grouud and in the open air.

The picket fence around the play grounds has been changed and completed.

After the new kitchen was occupied, the old one, with the pantries, was turned into part of the dining hall. This spacious room has been repainted and kalsomined.

The chapel was also enlarged and repainted; it is still too small for the great number of pupils; an outside chapel would be a decided advantage and would give more accommodation to the girls, as this room is taken up in their building.

The attic in the girls' building has been fitted up for a sewing room, by putting skylights in the roof.

The most noticeable improvement is the addition to the boys' building. It is 32x54 feet, three stories high, and is to be reserved for the small boys. This building is now under construction.

All these different works have been done by the instructors and pupils.

Health.

The health of the pupils has been very good. It has been observed by Indian agents and other visitors that our pupils are stout and good looking.

Three deaths have occurred during the year, two from consumption and one from brain fever.

Education.

The pupils, and particularly the girls, continue to make fair progress in the different branches of education.

With the new addition, we will have the advantage of a separate class room for he small boys, and the results will be more encouraging for the teachers.

The following shows the grading of the pupils according to the standards, with the changes suggested by the inspector :

Standard	I	64
"	II	29
"	III	15
"	IV	10
"	V	3
	Total number of pupils	121

The drill in calisthenics has been improved by the addition of dumb bells and Indian clubs.

The boys are very fond of this exercise, especially when it is accompanied by the music of the band.

The brass band has been well kept up and has made great progress under the able direction of the leader, Mr. W. Scollen. On different occasions they have had opportunities of displaying their musical talents before the public.

Trades.—Carpenter Shop.

The trade instructor, with several apprentices, has done all the above mentioned improvements. Moreover, they have made new sleighs, different pieces of furniture, fitted up wagons, hay racks and implements; painted rigs, cut fence pickets, and attended to all the repairs needed to the buildings, tools, etc.

Some work was also done for outsiders.

One of the apprentices worked several months for a neighbouring rancher.

Shoe Shop.

The same number of boys are working in this shop; some of these boys have been at the trade for several years, still their health does not seem to be affected by it. The shop is a large room and well lighted. No boots are purchased, as this shop supplies the required quantity for all the pupils. The worn out boots and the harness are also kept repaired. Moccasins for winter use are made here.

The following is a list of articles manufactured in this shop: girls' boots, thirty-eight pair; men's boots, seventeen pair; long boots, six pair; moccassins, one hundred pair; leather laces, six gross; halter, one.

Farm.

Several boys are working on the farm, and during the busy season the number is increased. Two boys have been hired out. Last summer they had just commenced cutting hay when an immense prairie fire swept over that part of the country, consequently hay had to be purchased.

The stock book shows: horses, four; mares, five; colts, six; bulls, one; cows, twenty-two; steers, twenty; heifers nine; bull calves, seventeen; heifer calves, ten; pigs, three; poultry, one hundred and fourteen.

Three oxen, one cow and two steers have been killed, giving four thousand nine hundred and sixteen pounds of beef.

We received from the farm last fall: eight hundred and forty-three bushels of oats; fifty bushels of wheat; three hundred and fifty bushels of potatoes; one hundred and sixty bushels of turnips; forty bushels of rye.

The following have been sown this spring: oats, thirty acres; wheat, one acre and a-half; rye, twenty-two acres, of which ten acres were newly broken land; potatoes, five acres; turnips and mangolds, five acres; garden, one acre.

The farmers have also done all the freighting of provisions, dry goods, coal, material for different shops, for buildings, etc.

Blacksmith's Shop.

This shop has again been kept open during the winter. A tradesman was hired, who also attended to the furnaces and the hot-air pump.

The following are the amounts of money for work done for outsiders: shoe-shop, $90; farm, $19; blacksmith's shop, $20; bakery, $23.

The number of girls has somewhat increased over the previous years; we find it very difficult to obtain girls from the reserves of this Treaty No. 7.

Under the good and attentive care of the Revd. Sisters they are making good progress in school matters. They take turns at different work, such as cooking, sewing, knitting, laundry work, etc.

All the clothes are repaired by them. Owing to the small number of big girls, only part of the clothes for the boys are made here, the others have to be purchased from the manufacturers.

I have the honour to be, sir,
Your obedient servant,

A. NAESSENS,
Principal.

REGINA, 5th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended 30th June, 1895.

Agreeable to instructions, I proceeded to Prince Albert, 17th July, 1894, to make a survey and establish the boundaries of a small reserve for refugee Sioux Indians who have resided in the neighbourhood of the town for some years.

Section 32, with the exception of the north-east quarter, sections 33, 34 and 35 in township 49, range 27, west of the 2nd meridian, were finally selected and the boundaries established. A subdivision of a portion of section 32 into farm lots was also made.

The reserve is generally woodland, but having been burnt over, clearing can be proceeded with without much labour, and the dry wood will find ready sale as rapidly as it is removed. The burnt woods consist of poplar only, groves of pine still remaining untouched, which will furnish good building logs. Hay meadows are scattered throughout the reserve, which will contribute largely to the support of the band.

Fish can be obtained at certain seasons in Sturgeon River, which flows through section 32, and the berries which abound in all directions furnish in their season remunerative employment for the women and children.

The Indians locating on this reserve are quite distinct from the community situated near Prince Albert, opposite to Moore and McDowall's saw-mill, and who were concerned in the Custer massacre, the former being the Wah-spa-ton (belonging to the Leaf Lodge) who came into the country at the time of the Minnesota massacre, and formerly lived near Winnipeg and Portage la Prairie, the latter being chiefly of the Santee or Ogellalla branch of the Sioux nation.

Having completed the survey of this reserve, I returned to headquarters at Regina 13th August.

Receiving instructions to proceed to the Birtle Agency, a few days were spent in Regina preparing the necessary outfit. A party consisting of myself and two men made a start for Birtle 29th August, which point was reached 5th September. Accompanied by Mr. Agent Markle, we proceeded to the Riding Mountain Reserve, No. 61, to examine into the matter of a disputed trail through the reserve, to inspect Clear Lake with a view to selecting a suitable fishing station for the Indians of the Riding Mountain Band, and to examine the Little Saskatchewan River to determine whether flooding of the lower lands along its course through No. 61, already mentioned, was possible. Separate reports have already been submitted on these matters. Since my last visit to this reserve in 1886, to re-establish the boundaries, fire has swept over the reserve, destroying much valuable timber, but at the same time clearing acres on the high land more suitable for agriculture than the low land along the river, which was formerly the only open portion of the reserve, and where the crops always proved a failure.

My instructions in 1886 only directed me to re-establish the boundaries, as the necessity for a resurvey of the reserve was not at the time known to exist, nor did I discover the necessity when opening, remounding and posting the lines. Fire having almost completely obliterated the boundaries, I considered it advisable to again restore them without waiting for instructions, and in course of the work, found that portions of the same lines, where discoverable in t e brulé, wou d not range, and further investigation convinced me that the boundaries had originally been run with a compass.

A resurvey was therefore determined on, and a traverse of the boundaries commenced. My survey effectually proved the reserve to be bounded by seventy distinct courses instead of by ten, and the boundaries in no case coincide, as they should, with the boundaries of sections or fractional sections. Iron posts were planted at the main corners and angles of the reserve, but the marking of the inter-

mediate points was left until returns of my survey have been submitted to the department and special instructions given with regard to the proper course to pursue.

As I had been instructed to accompany Mr. Agent Markle to Valley River, for the annuity payments, which would be a favourable opportunity to talk over with the Indians the boundaries of the proposed reserve at this point, for that portion of the Gambler's Band surrendering their share in Reserve No. 63, at Silver Creek, I found it necessary to abandon, for a time, the work I had undertaken at Riding Mountain.

Leaving Birtle 18th September, Valley River was reached on the 19th. An understanding was quickly arrived at with the band, with regard to the location of the reserve, and the survey work proceeded with without delay. The boundaries being completed by 10th October, the return journey to Birtle was made on the 11th and 12th.

The reserve is situated in a tract of country peculiarly well adapted to the needs of Indians, containing good soil, natural drainage, extensive hay meadows and fine timber. Notable physical features are Valley River and Short Creek. Valley River, a rapid stream of clear spring water, from fifty to seventy-five feet wide, enters the reserve at the west side, and traverses the southern portion in a southeasterly direction. Being generally easy of approach, it is favourable for watering stock, and furnishes a supply of fish at certain seasons of the year. Short Creek, a slow tortuous stream, ten feet wide, entering the reserve on the west side, and south of Valley River, meanders in an easterly direction to its junction, within the reserve, with Valley River.

It particularly deserves notice, from the extensive hay meadows along its course. The general physical features of the district are from undulating to rolling country, sloping towards the water courses. The soil is rich for a depth of six inches, the subsoil appears stony. The boundaries of the reserve generally skirt the open land, and were surveyed with a view to embracing within the eighteen square miles to be reserved the greatest possible proportion of open farm and grazing to wooded land. Much valuable timber, however, can be obtained within the reserve.

A delay of four days occurred at Birtle owing to the horses straying, but they were eventually found at Ellice with their hopples intact.

On the 18th October I again proceeded to Riding Mountain Reserve, and completed the work remaining to be done on the 25th.

From Riding Mountain Reserve I proceeded to Rolling River Reserve, to open out, and otherwise define, the outside boundary lines of the sections reserved at this point as a reserve. The work was carried on successfully, until the 10th November, when I had the misfortune to freeze my feet. The boundaries had all been cut out, chained and posted at this date, with the exception of the north boundary, which had still to be chained.

The line ran through brulé and windfall, requiring extra carefulness on the part of the chain-bearers, and, as my assistant was the only white man available, and could not undertake it with the assistance of an Indian, it had therefore to be left for another occasion.

The reserve is almost entirely wood land, the timber being poplar and large Balm of Gilead, two or three sections at the south end only being open country. The district is generally rolling or undulating, and the soil of first-class quality. Jack Fish Creek at the north-west corner of the reserve is said to contain a good supply of fish, and extensive hay meadows lie along its shores. Large and small game still furnish a livelihood to the Indians, and their energies are apparently devoted to hunting rather than farming.

On the 17th November the return journey to Regina was commenced. The weather for some time had been very severe, and the thermometer at this date registered 18° below zero. I found it necessary to leave my party at Shoal Lake, and proceed to Birtle by rail, owing to intense suffering from my feet. On the arrival of my party at Birtle, I accompanied them to Moosomin, where I proceeded

again by rail to Regina on the 20th, my party arriving by road on the 26th, when they were paid off.

Receiving instructions to proceed to the Blood Agency to inspect the timber reserve situated on the Belly River above the Blood Reserve, and, also, while in the Macleod District, to inspect hay lands, in the vicinity of the Piegan Reserve, I again left Regina 30th November. On my arrival at the Blood Agency, I was accompanied by Mr. Agent Wilson to the timber limit, where a couple of days were spent exploring the reserve. En route to the agency, on our return journey, levels were taken above the Cochrane Ranche, to estimate the amount of work required to irrigate the level lands within the Blood Reserve from the Belly River.

From the Blood Agency I next proceeded to the Piegan Reserve. The hay lands which Mr. Agent Nash desired to obtain for the Indians under his charge were examined, but no satisfactory search for hay could be made owing to the depth of snow among the Foot Hills. The partly constructed irrigation ditch near the agency, which had been undertaken by a squatter before the original survey of the reserve, was examined, and an estimate made of the amount required to complete it. From the Piegan Agency I returned to Regina, the 21st December. Separate reports on the above matter have already been submitted.

From the 22nd December, 1894, to 14th April, 1895, I remained at head-quarters, preparing returns of surveys made during the season, and other general office work in connection with the survey branch.

On the 15th April, 1895, I accompanied Mr. Assistant Commissioner Forget to the Muscowpetung's Agency, where a survey of Pasquah's Reserve was made, returning to Regina on the 18th.

I now received instructions to proceed to the Blackfoot Reserve, to superintend the completion of the irrigation scheme commenced in the fall.

At the date of my departure from the Blackfoot Reserve, 30th June, 1894, the main ditch had been completed for a distance of four and a half miles, but my services being required elsewhere, nothing further was done to carry on the work until this season. Before the ditch could be practically utilized, there still remained the deepening of the ditch at a few points, to provide for the water flowing at all seasons, the strengthening of embankments where experience had proved they require it, the extension of the main ditch to surround Old Sun's bottom; the construction of lateral ditches to benefit land off the line of the main ditch, and the construction of gates to control the water.

On my arrival, steps were taken to carry out the above programme as expeditiously as possible, with a view to profiting by the water during the present season.

Having no one to assist me in looking after the Indians, I could not employ more than I could personally superintend, consequently much still remained to be done at the time when the water should have been on the land.

The ditch was deepened where required, with the exception of short pieces which had to be abandoned for a time, owing to a transient rise of the river. The embankments were strengthened, the main ditch extended one and a half miles; a lateral three-quarters of a mile in length completed and six gates, including a large waste gate constructed, besides the pile driver employed in the construction of the waste gate. On the 16th June water was flowing through the ditch from end to end, and continued running until the 24th, when it was found necessary to shut it off to allow of the waste gate being constructed.

The waste gate, entailing the driving of six guide piles twelve feet long, and forty sheet piles twelve feet long, occupied the time from the 25th to the 30th of June, and the end of the fiscal year. The fiscal year closing at this point before my labours have been completed, I must trench on the new year to mention that in the course of another week several small gates will have been completed and the work of employing the water for the benefit of the grass lands, as well as the area under crop, within its reach, left in the hands of the officers in charge of the reserve, to be done as their best knowledge of the art of irrigation may guide them.

I may mention that the grass land flooded by the ditch between the 16th and 24th June, has taken on a nice green look, but until the numerous ponies in the possession of the Indians have been got rid of, or are herded, nothing can be expected in the way of a hay crop, and further, until an intelligent man is placed in charge of the ditch, whose duties will be to provide for the equal distribution of the water over the land under crop, and meadows, the water will only form pools and ponds, which will do injury to, instead of benefit to the produce.

Before closing my report, I would express my appreciation of the Indians on the Blackfoot Reserve, as workers: I consider them superior in this respect to any with whom I have come in contact in the Territories, being intelligent, as well as muscular.

I have the honour to be, sir,
Your obedient servant,
A. W. PONTON,
Asst. Surveyor.

BERENS RIVER AGENCY, TREATY No. 5,
24th July, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, together with tabular statement and inventory of government property under my charge, for the year ended 30th June, 1895.

Only seven hundred and five bushels of potatoes were planted in the different reserves in the agency in the spring of 1894, and, although what seed had been put in the ground and attended to turned out fairly well, yet the quantity harvested was inadequate to the requirements, as very few had any left over the winter for seed last spring. This year the department kindly furnished ninety-five bushels of seed potatoes to the Indians in this agency.

The fall and winter fishing turned out well at this and other reserves in the northern part of the agency, but whitefish were very scarce in the neighbourhood of the reserves south of this place. Moose and caribou were, however, fairly numerous and rabbits plentiful, especially so about the reserves in the northern part of the agency. Consequently the Indians did not suffer for want of food during the past winter, and, as usual, were of little or no expense to the department for provisions, excepting for the small annual supply of flour, bacon and tea provided for the different bands for aged and sick Indians in the district. During the past winter the fur hunt turned out fairly good in Peekangekum and Grand Rapids (Berens River) district; also in that part of Keewatin where the Indians of this agency usually trap and hunt.

Although there is at all times considerable sickness amongst the different bands of Indians in the agency, I found during my visits last spring that they generally were free from illness and contagious diseases.

There are at present eleven children from this agency attending the St. Boniface Industrial school. Others are willing to send their little ones, too, but are prevented from doing so by the principal of the institution and others on account of the parents being of the Protestant faith. The Indians in this agency were from the first, and are still, I find, averse to sending their children to the Brandon Industrial School, their only, or chief reason for complaint being that it is too far away from their reservations. Therefore, although advised by friendly and influential missionaries and others to send their children to the institution, only four receiving treaty annuities were allowed to go. There are six hundred children of school age in the

agency, and nine day schools in operation, with an average of four hundred and forty-eight pupils, who are doing fairly well.

The cattle have been better cared for during the past winter. Very few have been lost, and all are in good condition.

Sanitary regulations are being observed by most of the Indians. They are again building and making use of mud chimneys in their houses as formerly, and thereby obtain a cheap and thorough ventilation of their dwellings.

Non-treaty mischief-makers, who have been very troublesome heretofore at one or two reserves, have been expelled from these places; consequently there is now little or nothing to create ill-feeling between the Indians, and complaints are rarely met with.

I have the honour to be, sir,
Your obedient servant,

A. MACKAY,
Indian Agent.

INDIAN OFFICE,
VICTORIA, B. C., 18th September, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report as follows upon Indian affairs in the province of British Columbia, for the year ended 30th June, 1895.

The several reports of the Indian agents (nine) in my superintendency, together with their respective tabular statements and statistical returns, have been, without delay, forwarded to the department, as well as the estimates for the year 1895-1896.

I am happy in being able to state that during the period embraced in this report the attitude of the natives towards the government, their white neighbours, and one another has been friendly; and their general conduct on the whole most satisfactory.

In my visitations throughout the province I have noticed much improvement respecting their mode of living, their attention to, and realization of the benefits arising from careful sanitary measures; as well as their desire to follow the example afforded by their respectable white neighbours in regard to the care of their houses and gardens, and to neatness and order in their housekeeping arrangements, etc. This pleasing feature in the aspect of their general advancement is particularly noticeable amongst the Indians of the North-west Coast Agency.

On the Upper Skeena the feeling of distrust and dislike which for years had animated the natives towards the government and the whites generally, is happily dying out; these people being now more friendly and contented and exhibiting a greater desire to aid those interested in their advancement than has ever hitherto been apparent.

As a general thing there has been much less sickness throughout the respective agencies; this in a measure is accounted for by the very mild weather experienced during the winter of 1894-95, and, although at one time, owing to the appearance of small-pox in the Cowichan Agency, grave fears were for the time entertained that the province would be overrun by that epidemic, so fatal to the aborigines, the prompt measures adopted to prevent its spread were entirely successful, and all fatal results avoided. The superintendency was, I am happy to state, free from all other epidemic diseases.

It is with much regret I have to report that on the 14th April last, in a storm near Cape St. Elias, the sealing schooner "Walter A. Earle" was capsized, resulting in the loss of all on board. Amongst these were twenty-six British Columbian

Indians, who had been engaged for the seal hunting season. They unfortunately left twenty widows and thirty-eight orphans, all totally unprovided for, the deceased seal hunters trusting to that pursuit alone for the maintenance of their families.

The Indians of the west coast have been fairly successful in their catch of fur-seals, and have been well supplied with salmon, halibut, and other fish contributing to their food-supply, which has been abundant.

The catch of furs and fish throughout the superintendency has been satisfactory, and owing to the increased value of the former their returns under that head have been much better than for years past.

As mentioned in my report for 1893-94, the high water which prevailed last year destroyed the crops, and, to some extent, the orchards, of the Indians whose farms and gardens were upon the low lands, and consequently entailed upon those so situated much suffering and want during the past winter. The timely aid, however, furnished by the department in supplying seed to such as were disposed to avail themselves of it, and attempt a second crop, was of much benefit to many by enabling them to raise a limited supply of potatoes for themselves and families, and fodder for their stock.

The seed distributed this spring to such of the natives as through the losses named were unable to purchase such supplies for themselves was of inestimable benefit to them, their crops for the present year promising better returns than usual and a substantial relief from the distress created by the floods of 1894. The Indians appreciate the action of the department very much, and feel that they have been kindly dealt with in the time of their greatest need.

In such localities as the land is fitted for cultivation and pasturage the natives show an increased activity in agricultural pursuits and the raising of stock. On some of the reserves large fields of wheat, oats and barley, as well as root crops, are to be seen, comparing favourably with the produce of their white neighbours; and horses and cattle of an improved breed are to be observed upon some of the reservations.

It is also noticeable that to quite an extent the old rancheries, where numbers of families with their attendant dogs, cats, chickens, etc., etc., used to congregate in a most unsavoury manner, are being abandoned, and neat houses occupied instead.

The industrial schools, of which separate reports have been forwarded, continue to give evidence of the most favourable results; and the feeling of uncertainty on the part of the parents and guardians of the pupils as to the benefits likely to accrue to their offspring or wards from such a course of training has almost entirely disappeared. When first started in this superintendency these institutions were looked upon with suspicion and doubt by the untutored Indian whose primitive ideas opposed, as a general thing, to the ways of the whites, feared some covert design on the part of the government to alienate their children, of whom they are very fond, from them, and the revered custom of their forefathers, etc., etc.; they then could not realize the benefits of education, but now, experience having shown them that the children are kindly treated, and that the lessons taught them are of a nature to benefit them through life, they are most anxious for their admittance, and applications are being continually made for the establishment of such institutions in such localities as are at present without them. I may state that in some of the native villlages, stores have been established which are conducted entirely by the Indians who visit the coast periodically and themselves purchase such supplies as they require.

In some of these stores I have seen Indian boys who have been educated at the industrial schools, acting as clerks and book-keepers most successfully.

A limited supply of food, and in some exceptional cases, clothing has been supplied to the aged, destitute and sick, who have been in absolute need, and without native friends to help them; medicine also and medical attendance has been furnished to those who much needed such aid, and were as far as could be ascertained entirely without the means of paying for either.

In regard to the above expenditures I must add that everything is being done by the agents and by myself to keep them as low as possible, and by degrees the

Indians are being brought to see that when they possibly can they must meet such expenses themselves.

The departmental steamer "Vigilant" continues to do good service in the North-west Coast Agency, and Mr. Agent Todd reports that since the repairs done upon her machinery, etc., last spring, she runs better than ever.

The work in connection with Indian affairs in this province continues to increase and taxes to the utmost the powers of my limited staff, two in number. This must continue to be so as settlement increases all over the province, bringing to life new industries and interests affecting to a great extent both the natives and their reserves.

The following statistics show approximately the present condition of the native people, and of the returns from the different Indian agencies, etc.

Fraser River Agency.

The spring of 1895 has been most promising, and the outlook for this season's crops unusually good.

The bands throughout the agency are on the whole showing steady advancement, and in many cases, especially those on the sea-coast, give evidence of higher aspirations in regard to their mode of living, etc.

The boarding schools are well attended, the Indian parents are more desirous of such training for their children, and those at the schools now established are progressing most satisfactorily.

The value of property is steadily increasing, and although there is a slight falling off in the "value of fish taken," there is a pleasing increase in the returns from "other industries."

The statistics showing the various returns are as follows:—

Value of personal property		$160,360
Acres under cultivation		3,696
New land broken	acres	91
Total value of real and personal property		$1,072,818
Ploughs		114
Harrows		92
Wagons		83
Carts		8
Threshing machines		1
Mowing machines		10
Reapers		3
Number of other implements		1,944
Horses		708
Cows		752
Oxen		150
Bulls		30
Sheep		229
Pigs		2,101
Number of young stock		473
Value of fish taken		$42,100
Value of furs		$17,085
Other industries		$30,850
Corn	bushels	567
Wheat	"	1,872
Oats	"	6,851
Pease	"	3,604
Barley	"	1,686
Potatoes	"	11,185
Hay	tons	1,439

The agent remarks as follows:—The decrease in agricultural products is due entirely to the fact that the floods destroyed nearly all the crops, including hay, on the following reserves, viz.: Hope, Skawaklooks, Ohamil, Squatits, Chehalis, Scowlitz, Sumass, Skweahm, Skwah, Kwawkwawapilt, Squiahla, Aitchelitch, Skway, Langley, Kaitsey, Coquitlam, and New Westminster. Several other reserves suffered slightly from the floods, viz.: Popkum, Cheam, Yale, Douglas and Pemberton Meadows.

Kootenay Agency.

In the Upper Kootenay the Indians take kindly to farming and stock-raising.

Unfortunately in many cases the crops are a partial failure for want of water for irrigating purposes, and such results are discouraging. Under more favourable circumstances the tilling of the soil would be carried on by these natives much more extensively, especially as the development of mineral wealth in that district creates a paying market for all agricultural produce.

The decrease of game, which has been observed for many years, has also a tendency to fix their attention upon such domestic pursuits upon which they will have mostly to depend in the future for their support.

The Lower Kootenay Indians do little or nothing in the way of gardening, and that of the most desultory nature. They live chiefly by hunting and trapping, upon fish, and what they can earn among the settlers, as packers, messengers, etc. They are not accustomed to manual labour, and do not take kindly to hard work.

The reports from the Kootenay Industrial Indian School continue to be most encouraging, and that institution gives abundant promise of assisting materially in the advancement of these Indians.

The statistical returns are hereto appended:—

Value of personal property		$77,500
Acres under cultivation		319
New land broken	acres	13
Value of real and personal property		$187,305
Ploughs		45
Harrows		15
Wagons		15
Mowers		4
Number of other implements		31
Horses		1,477
Cows		307
Oxen		55
Bulls		21
Number of young stock		302
Value of furs		$3,300
Wheat	bushels	365
Oats	"	2,450
Pease	"	160
Potatoes	"	1,370
Hay	tons	105

The agent remarks in his tabular statement as follows, viz.:—The decrease in the St. Mary's Band is by the death of several of the very old Indians. The same may be said of the Columbia Lake and Lower Kootenay Bands. Marriage with other Indians and births have increased the Tobacco Plains and Shuswap Bands. The agent changed the value per acre of Tobacco Plains Reserve land from $5.00 to $2.50 per acre, the latter being the more accurate value, which accounts for the apparent decrease in value of "Real and Personal Property."

Williams Lake Agency.

Although a few of the bands have suffered a decrease in their numbers, there has been an increase of eighteen in the whole population of this agency and the statistics tend to show a general advance under the different heads enumerated.

Such of the bands as are located on the Fraser collect their usual annual return of gold from the bars on that river. The crops throughout the agency were good.

These Indians are improving their dwellings and evince a deep interest in their religious offices as is shown by the fact that four new churches are being built on the same number of reserves within the agency.

The increased activity of late in working the Cariboo gold mines will stimulate their farming operations, as there is every indication for the opening up of a good market for their surplus products. They have good roads and abundant means of transport at hand. The statistics are given below :—

Value of personal property		$58,500
Acres under cultivation	acres	1,257
New land broken	"	40
Total value of real and personal property (including value of buildings)		$220,587
Ploughs		102
Harrows		36
Wagons		25
Fanning mills		9
Threshing machines		1
Mowing machines		28
Number of other implements		535
Horses		2,723
Cows		799
Bulls		29
Pigs		546
Number of young stock		187
Value of fish taken		$955
Value of furs		$9,625
Other industries		$19,100
Wheat	bushels	4,942
Oats	"	5,105
Barley	"	670
Pease	"	24
Beans	"	7
Potatoes	"	6,580
Hay	tons	1,199

Cowichan Agency.

Quite a number of the old people died during the spring from the affects of la grippe, which with the accidental deaths, has brought about a decrease of over a hundred in the census returns.

During the year the Indians have generally done well. The crops were good, and there is an increase in the number of those who work steadily upon their farms, and do not seek the temporary employment offered at the canneries and hop fields.

Many turn their attention and labour to building boats for fishing at the canneries, and make good wages. Canoes are not considered so well adapted for that work and are consequently falling into disuse.

During the year there were three cases of small-pox discovered, but fortunately owing to precautionary measures promptly taken and strictly carried out, no panic or spread of the disease ensued.

The statistics are given herewith:—

Value of personal property	$77,350
Acres under cultivation	2,415
New land broken.....acres	36
Total value of real and personal property	$913,295
Ploughs	123
Harrows	63
Fanning mills	1
Wagons	187
Threshing machines	8
Carts	8
Mowing machines	7
Reapers	1
Horses	401
Cows	351
Oxen	92
Bulls	19
Sheep	680
Pigs	113
Number of young stock	571

Value of fish taken; value of furs and other industries. (The agent remarks, "no means of estimating.")

Wheat	bushels	100
Oats	"	50,000
Pease	"	200
Potatoes	"	1,000
Hay	tons	800

The agent makes the following remarks in his tabular statement, viz.:—

This approximate estimate is as nearly as possible correct. Crops of the different bands are so intermixed that a separate statement for each band is impossible.

The Saanich, Cowichan and Nanaimo Bands are the only ones who grow grain for market.

Kwawkewlth Agency.

As a general thing the health of the natives has been good, what sickness there was being confined to the aged and infirm.

An improvement in sanitary arrangements has taken place, and also in the class of houses being built in this agency.

Employment at many of the canneries in 1894 was not remunerative, owing to a falling off in the run of fish and to an unusually protracted season, which increased the expenses of the natives so employed, their earnings being reduced to almost nothing.

They had, however, an abundance of salmon and other fish for their food supply, and berries were very plentiful.

Many of these Indians follow the occupation of "hand-logging," and make fair wages.

There is very little cultivation of the soil carried on, the land mostly being unfit for farming or gardening purposes.

The following are the statistics, which show an increase over last year's returns, viz.:—

Value of personal property	$ 82,500
Acres under cultivation	11
New land broken.....acres	2
Value of real and personal property	$115,156
Cows	4
Bulls	1
Pigs	55
Number of young stock	7
Value of fish taken	$ 16,000
Value of furs	3,150
Other industries	19,025

The agent remarks that very little is attempted in the way of agriculture and no figures can be entered in the columns for that purpose, as only a few very small patches of potatoes and garden stuff are grown. No hay has been cut this year, the cattle on the Wiwaiaikai Reserve being able to obtain a living for themselves during the winter.

North-west Coast Agency.

There is an increase in the total population reported by the agent. Sanitary conditions have been good, and there has been no epidemic experienced, hence the mortality has been much less than usual.

Throughout the agency a great improvement is observed in the houses and gardens and general mode of life of those Indians who seem to be actuated with a desire to imitate the habits of their white neighbours in all praiseworthy ways.

The Indians, although there was a falling off in the demand for employment in many of the industries at which they are accustomed to work, were yet fairly well off; and the shortages in earnings were met by a consumption of less of what they call "the white man's food," and by the laying up of a much larger supply than usual, of late years, of fish for winter use.

The fur catch has also helped them out, being over the average, the furs realizing a higher price than has been obtained for years.

The statistics show an improvement over last year:—

Value of personal property	$219,000
Acres under cultivation	131½
Acres of new land broken	17½
Total value of real and personal property	$700,868
Number of other implements	829
Horses	33
Cows	7
Pigs	10
Number of young stock	12
Value of fish taken	$93,350
Value of furs	$62,980
Other industries	$161,750
Potatoes.....bushels	4,850
Turnips..... "	1,065
Other vegetables.....tons	13
Hay..... "	23

Kamloops-Okanagan Agency.

There is a falling off in the returns of agricultural operations for this agency, owing to floods in some parts and drought in others, and in the value of personal property incidentally for the same reason. The census shows a decrease in the population. The Indians in this agency, appear to make sufficient provision to meet the varied contingencies of the climate, which largely affects their crops for good or otherwise. They are becoming less dependent for their food on runs of fish and products of the chase, and a very small proportion of the indigent old come to the department for food, the principal demand for relief being in the way of medicines and medical attendance.

The Industrial School at Kamloops is well attended and the pupils are advancing satisfactorily.

The usual quantity of gold was collected from the foreshore of the Fraser during low water, and the development of quartz mining in the Similkameen affords employment to many of the natives in that region.

The health of the Indians has been good and the Lytton Hospital has been most successfully carried on under the care of the nurses in charge.

Hereto are attached the statistics :—

Value of personal property		$123,684
Acres under cultivation		2,479
New land broken	acres	26
Total value of real and personal property		$469,180
Ploughs		188
Harrows		97
Waggons		61
Carts		1
Fanning mills		26
Threshing machines		1
Mowing machines		17
Reapers		4
Number of other implements		4,335
Horses		4,752
Cows		1,358
Bulls		8
Sheep		1
Pigs		811
Number of young stock		549
Value of fish taken		$6,900
Value of furs		$14,930
Other industries		$87,100
Corn	bushels	273
Wheat	"	5,817
Oats	"	7,258
Pease	"	469
Barley	"	278
Rye	"	250
Beans	"	233
Potatoes	"	13,216
Hay	tons	1,500

Babine Agency.

The reports from this agency are on the whole very satisfactory and show a steady progress on the part of the Indians towards higher conditions. They have still to depend mainly on the fur trade for the means to procure such necessary articles as are not produced in their country. The increase of their live stock and extension of their farming operations are most encouraging.

The attendance at the Hazelton school has been somewhat irregular, partly owing to a temporary change in the management.

The sanitary conditions throughout the agency have been satisfactory and with very few exceptions the general health of all the bands of Indians has been very good, with a total absence of epidemic or contagious diseases. There is a considerable increase in the value of their real and personal property and in their returns of fish, furs and potatoes. The census of the population shows an increase of nearly six per cent.

Statistics follow:—

Value of personal property	$35,950
Acres under cultivation	178
New land broken.....acres	23
Total value of real and personal property	$89,250
Number of other implements	6,040
Horses	325
Cows	167
Oxen	41
Bulls	16
Number of young stock	54
Value of fish taken	$32,750
Value of furs	$43,700
Other industries	$28,000
Potatoes.....bushels	2,205
Hay.....tons	18½

West Coast Agency.

The Indians of this agency have to depend mainly on the products of the sea for their livelihood. It is to be regretted that the sea otter, once a source of great profit to them, is becoming very scarce.

They show a marked desire to improve their condition. They take considerable interest in having their children educated, as is instanced by the attendance at the school lately opened by the Presbyterian Mission at Ucluelet, which is very encouraging. Their country is not adapted for general farming, but vegetables and the small fruits may be cultivated with advantage and the Indians are turning their attention to these. Cattle may also be raised in some localities.

During the past year these Indians have added to the value of their real and personal property. There is a large increase in the value of their fur returns, but a falling off in their earnings in other industries owing to the dull times which have prevailed for some time.

The seal fishery is the main source of profit to them. The salmon cannery industry has been started in Clayoquot Sound with favourable prospects, and has kept quite a number of Indians at home in that vicinity.

The general health and condition of these Indians is reported good.

I attach the statistics :—

Value of personal property	$71,700
Acres under cultivation	13
Total value of real and personal property	$112,150
Ploughs	1
Horses	20
Cows	5
Sheep	40
Number of young stock	9
Value of fish taken	$22,150
Value of furs	$133,300
Other industries	$7,600

One thousand seven hundred bushels of potatoes were raised by the various bands of the agency, as follows:—

Oiaht	bushels	100
Howchuklisaht	"	80
Tseshaht	"	100
Opitchesaht	"	60
Clayoquot	"	80
Kelsemaht	"	80
Ahousaht	"	200
Hesquiaht	"	200
Matchillaht	"	100
Noochahtlaht	"	200
Ehattisaht	"	200
Kyukaht	"	200
Chaicclesaht	"	100

The agent makes the following remarks in his tabular statement, viz.:—

"The Tseshahts and Opitchesaht Bands of Indians cut barely enough hay for their horses. No increase in agricultural pursuits since last year except that the Ahousahts have planted an unusually large quantity of potatoes; the total for the agency for the year is 1,700 bushels. Very little dog-fish oil has been made on the coast this year, most of the tribes having done well sealing and there being no demand for oil in the market, the price is accordingly low. There is an increase in the value of seal catch, also in houses and personal property. There is a decrease in fish oil and other industries."

The following schools have received the government grant during the past fiscal year, viz.:—

Industrial and Boarding.

Kamloops Industrial.	Kuper Island Industrial.
Kootenay do	Metlakahtla do
Williams Lake do	Alert Bay do
All Hallows Boarding.	Coqualeetza Boarding.
St. Mary's do	Indian Girls' Home, Port Simpson.

Indian Girls' Home, Alert Bay (special).

Day Schools.

Hazelton.	Port Simpson.
Metlakahtla.	Lakalsap.
Kincolith.	Port Essington.
Massett.	Kitkatla.
Bella Bella.	Cape Mudge.
Nimpkeesh (or Alert Bay).	Gwayasdums.
Ucluelet.	Nitinat.
Alberni.	Kyuquot.
Songhees.	Nanaimo.

Medicines.

Drugs, etc., have been furnished to the various agents and missionaries in the province, such supplies being reduced to what was considered absolutely necessary. The greatest efforts have been made in the direction of making such as were in a position to do so pay for their own requirements in respect to medicines and medical attendance.

I have the honour to be, sir,
Your obedient servant,

A. W. VOWELL,
Indian Superintendent, B.C.

THE PAS, SASKATCHEWAN, N. W. T., 9th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—In accordance with your instructions of the 5th of April last, I have the honour to forward my annual report on Indian affairs in this agency, together with the accompanying tabular statement for the fiscal year ended the 30th June, 1895.

During the past year each of the six reserves has been visited at least twice, while that at the Pas, containing about two thirds of the Indians under my supervision, has received frequent attention, situated as it is in the immediate neighbourhood. More visiting would have been done but for the long distances to be traversed in a district like this; for, although there are but about one thousand Indians in this agency, they are widely scattered. From the centre, namely at the Pas, to Cumberland House (single journey), it is some seventy miles; from the Pas to Pas Mountain, one hundred miles; from the Pas to Moose Lake, sixty five miles; from the Pas to Chemawawin, eighty miles; and from the Pas to Grand Rapids, one hundred and forty miles. But to go from one place to another consecutively means a journey of over five hundred miles; and frequently during the summer months the Pas Mountain is almost inaccessible, owing to the usual low water. It is therefore no easy task to move about among the people so widely scattered. Neither can it well be otherwise; for these parts are not adapted to extensive farming (save along the Carrot River and at the Pas Mountain), but are essentially a fishing and hunting district. Gardening operations therefore are carried on on a small scale. The musk-rat and rabbits in winter, and fish more or less all the year round form the staple articles of sustenance for these swampy Indians, except those at the Pas Mountain, as will appear further on.

I will now notice the reserves in detail.

Grand Rapids, situated as it is at the mouth of the Great Saskatchewan, has the immense advantage of being near the great fisheries established on Lake Winnipeg. The Indians here are, with one or two exceptions, poor gardeners. At times, however, they find employment at the fisheries and wharfs. They would obtain more but for some independent actions on their part, in consequence of which the fishing companies do not employ so many of them as formerly.

The school on this reserve has not been in operation since last summer.

Ascending the rapids, and crossing Cedar Lake, we arrive at Chemawawin, where the Indians have an excellent hunting ground in the rat swamps. But this fur-bearing animal is fluctuating and it is not improbable that it may become more or less extinct as the Saskatchewan lowers year by year. This is also a good place for sturgeon, and during last winter the Indians caught many.

There are small patches of potatoes on this reserve, this year being much better than last.

At Chemawawin the school is efficiently carried on by Mr. Thomas Lamb, a well educated young gentleman from England; and as a result of his teaching there will probably be developed the somewhat dormant intellects of not a few Indian pupils. One special feature in the programme of education in this school appears to be the healthful exercise of calisthenics. There is progress at Chemawawin.

Travelling up the river and across open country, with a biting cold north wind in winter, or under almost tropical heat in summer, with innumerable insects to contend with, we reach Moose Lake, where the Indians are now settling in two bands on their new reserve. This is a good lake for fish most of the year round; but the Indians, for the greater part of them, are poor gardeners, though this year they have done fairly well.

It may be interesting here to mention that when Mr. Inspector McGibbon visited this reserve in September last, he promised a dress each to two of the Indian women who would have the cleanest, neatest, and best kept houses. In examining the Indian domiciles during my last visit to Moose Lake, I had no hesitation in deciding in favour of Mrs. Jeremiah Pachenoos and Mrs. Oliver Johnston Tobacco at

Big Island. The former of these two women I found fairly well dressed, and drying some very fat sturgeon caught that morning, and withal too large to be put in the canoe, but had to be dragged ashore.

Moose Lake school is now kept by Mr. W. R. Taylor, and is making better progress than formerly.

After Moose Lake comes the Pas, which is reached by a long and tedious journey up the river. Here the Indians are a fairly intelligent number of people. Last fall they broke up an amount of new land, and burnt lime for their houses. Their fishing ground is a good one during the summer; but, if deprived of the fall catch in the lakes and rivers, they are exposed to privations during the cold weather. Last summer the grasshoppers destroyed many of the Pas gardens; but this year there is a good prospect of potatoes, if these destructive creatures, which are numerous in some parts, let them alone.

On the Pas Reserve there are two schools, one of which is temporarily closed. The attendance at both schools is generally good; and it is an encouraging fact that from here pupils have been sent to higher establishments.

After leaving the Pas we soon strike the Carrot River; and here the difficulties of travelling in these parts are met and fully realized, owing to the scarcity of water. At eighty or more miles from the Pas we reach Shoal Lake Reserve, and then by canoe and foot for some twenty miles more we arrive at the picturesque little village of Red Earth. These two off-shoots from the Pas Band have the advantage of first-class soil, especially that at Red Earth, and it only needs clearing and cultivating to raise all kinds of ordinary grain and vegetables. The Red Earth Indians are more thrifty than their neighbours at Shoal Lake, and have a goodly number of cattle, as well as some excellent gardens. They raise large crops of potatoes upon which and milk they chiefly live, for there are but few fish there, and those of an inferior kind.

There is no school at Red Earth, but one at Shoal Lake, which, however, is temporarily closed. The Indians at the latter place have done better since removing from the low, salty grounds to the woods where the soil is good.

Descending the Carrot River to the Saskatchewan about three miles above the Pas proper, we are on the way to Birch River Reserve, which, however, is still unoccupied save by a mere handful from the Pas who have done but little owing to the sickness and death of the chief man among them.

From Birch River Portage we soon reach Cumberland, which is the western terminus of this agency. Here the Indians have done very well. Never since the exodus of the half-breeds from this reserve has there been such a stir with axe and grub hoe. A fair amount of new land has been brought under cultivation, and more new houses have gone up; but the scarcity of fish in the immediate neighbourhood is a hindrance to much home progress.

The school on Cumberland Reserve has not a large attendance, but is doing fairly well under the circumstances.

Thus a journey is accomplished around the agency, while correspondence has accumulated during say a months' absence. Indeed, alternate travelling and office work keep one going almost continually. But since the department has allowed the school teacher to assist in the outside work, an amount of valuable help is thus rendered, and I doubt not that results will be most beneficial to the Indians in advancing them in the various branches of civilization.

I am thankful to be able to report that the sanitary instructions of the department have been generally carried out by the various bands who are now reaping the benefit of more cleanly habits than they were formerly accustomed to.

The provisions and clothing allowed by the department for the destitute were distributed among those in need, and such have been numerous during the past year. In fact, without this timely assistance there would doubtless have been much suffering. It is proverbial that Indians are not grateful; but I have heard some grateful expressions from some of these poor people which show that the gifts are appreciated.

In conclusion it should be stated that during the year most of the surveys in this agency have been completed by Mr. S. Bray, by which more arable and useful lands have been allotted to the Indians, and the portions surrendered now return to the crown.

All which is respectively submitted.

I have the honour to be, sir,
Your obedient servant,
JOSEPH READER,
Indian Agent.

OFFICE OF THE COMMISSIONER OF INDIAN AFFAIRS,
NORTH-WEST TERRITORIES,
REGINA, 20th September, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year 1894-95, ended 30th June last, in which I have endeavoured briefly to review the work of the year and the general condition of the Indians throughout the North-west Territories, under the following sub-heads:—

Agricultural Operations.

Notwithstanding that the harvest of 1894 was very light throughout all the reserves, the seeding of 1895 was entered upon by the Indians everywhere with undiminished energy; the numerous indications of a favourable season renewing the hope that this year's operations would be crowned with success.

This hope has, I am pleased to say, been in the main very fairly realized in the harvest which at this date is being gathered in, though unfortunately, in the Saddle Lake and Duck Lake Agencies in the north, Crooked Lake Agency in the east, and on several of the reserves in other agencies to a lesser extent, unfavourable weather in the latter part of the spring and late frosts have combined to materially lessen the returns in so far as the grain crop is concerned.

There has been no increase in the area under crop, this, as compared with last year; but there was noticeable a very decided improvement in the manner in which the land was prepared, and the seeding and planting done.

One result of the poor returns from grain in the past two years has been an increase in the acreage under garden and field root crops, and it is pleasing to note that at last the efforts of agents and farmers in this direction, and towards the bestowal of more attention upon this part of their farming, are now being responded to by an ever increasing number of the Indians.

Owing to the stimulus given by the success of this season in crops of all kinds, I anticipate a considerable increase in the acreage under cultivation next season, for all of which the Indians, with the possible exception of one or two bands, will be in a position to furnish seed without aid from the department.

Live Stock.

The winter of 1894-95, was very favourable for stock, and a good supply of hay having been secured during the preceding summer, all came through the winter in very good order, and the early spring of the present year, together with the remarkably good pasturage of the past summer, has maintained the herds in fine

condition. The calf crop of this season has been very good, and, as a result of the policy of gradual introduction of thoroughbred bulls, the calves of this and last season continue to show very marked improvement.

As evidencing the proportions which the Indians' herds have now assumed, in consequence of the very close supervision which this branch of farming has received, it may be said that in Treaties Nos. 4 and 6, covering the whole extent of the North-west Territories, (except the south-west portion, which is covered by Treaty No. 7) the beef required for agency purposes and for those Indians who are not yet sufficiently advanced to support themselves entirely, was supplied in thirteen out of fifteen agencies wholly by the Indians from their own herds.

In Treaty No. 7, which comprises the Sarcee, Stony, Blackfoot, Blood and Piegan Reserves, these results have not yet been attained; but as each year finds the herds of these Indians increasing, and the Indians themselves more anxious to become possessed of stock, and more careful and attentive to those now in their hands, the prospect of achieving, at a not far distant date, the same measure of success which has crowned the department's policy in the other treaties is bright indeed.

Individual Earnings of Indians.

There has been during the past year no relaxation of the efforts which are constantly being put forth to find profitable employment for our Indians, apart from the work devolving upon them from the care of their farms and stock. In fact, owing to the almost general failure of the crops of 1894, it has been necessary to increase, if possible, the efforts in this direction, in order, first, to call into practice in the face of many difficulties that spirit of self-reliance which it is the aim of the department to inculcate in our Indians, and thus strengthen them for future efforts, and, second, to prevent what would otherwise have been a severe tax upon the financial resources of the department had the support of any large number of Indians who had suffered by the failure of crops not been in a great measure obviated in this way.

It is pleasing, therefore, to note that notwithstanding the fact that the financial depression which prevailed generally throughout the Territories materially lessened the demand among the settlers and in the towns for labour, and also that, owing to the competition of settlers seeking employment and a market for firewood, &c., lower wages and prices obtained, the aggregate earnings of the Indians in Treaties 4, 6 and 7 for the fiscal year amounted to $120,759, as compared with $91,398 in the previous year, or an increase of $29,361.

At the same time, the greater difficulty which the Indians have experienced in earning this money has had the effect of making them even more careful than in the past in expending the same, and this fact, together with the low prices which obtained throughout the year for the staple articles of food, has had the effect of making their earnings go much further towards their support than heretofore.

General Progress.

The annual reports of the agents throughout the Territories show ample evidence of a continuance of the advance that is steadily being made on all the reserves in the direction of ultimate independence. More intelligent effort is being put forth by the Indians to increase their accumulations of property, to improve the value of the same and to better their home surroundings, and it is highly gratifying to note that these efforts are meeting with so large a measure of success.

They are, with the aid of their agents, in many instances seeking new sources of revenue, and in several agencies are now carrying on dairying on a sufficiently large scale to enable them to place on the open market butter of a very satisfactory quality.

Poultry-raising is also beginning to receive greater and more intelligent attention, and gives promise of becoming a successful industry in the near future.

The steady improvement in the class of houses on the reserves and the desire before referred to, for improved interior fittings and furnishings and increased comfort, has been very noticeable and cannot but be regarded—second to the desire to accumulate property—as one of the most hopeful signs that the old order of things among these people has now passed away for ever and that the new, which has been substituted by years of patient effort, has come to remain.

The Indian Exhibits at the Territorial Exhibition.

As proof of the great strides made by the Indians in the pursuit of civilization, I am pleased to be able to report the splendid success made by them in their varied exhibits at the Territorial Fair, held in Regina from 29th July to 7th August last. The improvement over the Indian exhibit at the World's Fair in 1893 was most marked. The exhibits were shown in a frame building, 50 by 25 feet, which was erected solely by the carpenter pupils of the Regina Indian Industrial School, the work upon which was decidedly a credit to them.

The exhibits were principally from the Moose Mountain, Crooked Lake, Assiniboine, File Hills, Muscowpetung, Touchwood, Duck Lake, Carlton, Battleford, Onion Lake, Saddle Lake, Edmonton, Hobbema and Blackfoot Agencies, and from the Qu'Appelle, Battleford, Regina, High River, St. Albert, Elkhorn, Rupert's Land and St. Boniface Industrial Schools, as well as from several day and boarding schools, notably those of File Hills, Touchwood and Crowstand.

These consisted of farm products, carpentry, blacksmithing, tailoring, harness, shoemaking and tinsmithing work, and printing, also bread, butter, cheese, jam, soap, articles of clothing, knitting, lace work, embroidery, home-made furniture, wooden ox collars, double-trees and single-trees, axe and fork handles made out of native wood and ironed by the Indians, horse-shoes, hinges, pincers and a great variety of other articles, numbering in all about fifteen hundred specimens.

The school work, writing, problems and maps (both in drawing and relief), was exceptionally good, as is well evidenced by the fact that the Qu'Appelle Industrial School took first prize for a set of relief maps in open competition with every school in the Territories, also the first prize for writing, and a second prize for an individual map.

The following prizes were all won by Indians in open competition with the whole of Manitoba and the North-west Territories :—

Articles.	Prize.	Name and Address.
Iron harrows	1st prize	Joseph Kent, Rupert's Land School.
Boots, riding	1st "	W. R. Bear, Elkhorn School.
"	2nd "	John Severight, Regina School.
Boots, ladies'	1st "	Roy Wawekowekit, Elkhorn School.
"	2nd "	Blackhorse, Elkhorn School.
Shoes, men's	1st "	Wm. McGirr, Dunbow School.
"	2nd "	John Severight, Regina School.
Shoes, ladies'	1st "	Roy Wawekowekit, Elkhorn School.
Boots, collection	Diploma	Elkhorn Industrial School.
Harness, set heavy	"	Frank Seaton, Regina School.
" light	"	C. McDonald, Elkhorn School.
Specimen wood work, tool chest		Tom Quoquet, Rupert's Land School.
Model stair case	Special prize	" " "
Iron farm gate	1st prize	A. Woodhouse, " "
Set of maps (8)	1st "	Qu'Appelle School.
Individual map	2nd "	"
Specimen of writing	1st "	"

The brass bands belonging to Qu'Appelle, St. Joseph's (High River), Regina and St. Albert Schools supplied nearly all the music at the fair, and won universal praise for the excellence of their playing, their time and attack being admirable,

especially considering the fact that they were only Indian lads from ten to eighteen years of age.

During the term of the fair a daily newspaper was published by some of the pupils of the Regina School who form the printing staff of that institution, and the little paper was highly appreciated by the visitors, who watched with delight the dexterity with which the little fellows set up the type and forms. Several thousand copies were presented to the visitors as souvenirs of the Indian exhibit.

On the fourth day of the exhibition about fifteen hundred Indians assembled by appointment to meet His Excellency the Governor General and Lady Aberdeen. The Indians, who were principally from the reserves in Assiniboia, together with delegates from the Blackfoot, Stony, Blood and Piegan Reserves, were all grouped on and about the large platform opposite the grand stand. On one side there were seated over two hundred pupils from the industrial schools, neatly attired in their school uniforms; on the right were grouped all the Indians in their native varicoloured costumes and the left was occupied by the Vice-regal party.

The scene was a most brilliant and animated one, the day exceptionally fine and the grand stand crowded with spectators who viewed the novel scene with pleasure and marked the contrast between the older Indians in their gorgeous costumes and their children in their neat and simple school uniforms with evident appreciation.

After the four combined Indian bands had played "God save the Queen," the leading chiefs and headmen were presented to Lord and Lady Aberdeen; after which His Excellency addressed the Indians through the medium of the Cree and Blackfoot interpreters.

The address was of a most cordial and encouraging nature and one that cannot but prove of incalculable benefit in stimulating the Indians to still greater efforts in the way of advancement in civilized pursuits. Among other things he congratulated them upon the splendid show of exhibits, and said they ought to be proud of their children, for their progress was evidenced by the fine appearance of those present, and the work shown by the various Indian schools at the exhibition.

To the Indian boys, members of the brass bands, His Excellency stated that he was so pleased with their playing that he would give each member a silver medal which he hoped they would prize as a memento of the day, and further announced his intention of giving a prize for competition between the four Indian bands. This musical contest took place immediately after the withdrawal of Their Excellencies to the grand stand and was considered by the large concourse of visitors present as one of the most interesting features of the day. Each band did its utmost, and was applauded in turn, the prize being finally adjudged to the Qu'Appelle Industrial School band. The St. Joseph's School band, which in the opinion of one of the three judges appointed for the competition should have been awarded the prize, was so much admired by His Excellency that he decided to give it a special prize, which he has since forwarded to the school under cover of an autograph letter addressed to the pupils of the institution.

It would take up too much space to repeat the praises bestowed upon the Indian exhibit by the visitors and the press generally; in fact, until assured that the articles exhibited were actually the product of Indian labour, visitors were hardly inclined to give credence thereto.

That many of the Indian exhibits fully equalled, and in some cases excelled the products of white competitors, is beyond doubt and fully demonstrates the rapid advancement that is being made in civilized pursuits by our Indian population.

Irrigation.

In the autumn of 1893, the construction of an irrigation ditch on the Blackfoot Reserve was decided upon in order to render available for agricultural purposes a large tract of bottom land lying along the Bow River, favourably situated for irrigating, and the preliminary surveys were completed that season.

The work of construction was entered upon in 1894, and practically completed during the present summer, all labour connected with the excavations being

performed by the Indians, and the entire work carried on very economically under the able supervision of Mr. A. W. Ponton, of the survey staff of this office. Four and one-half miles were finished during the season of 1894, and this season the ditch was extended to a total length of seven miles, in addition to which some lateral drains were constructed.

Considering the magnitude of the undertaking, the outlay therefor was very small, and considerably more than half of it was borne by the band, from funds derived from timber dues, royalty on coal, etc. Water was turned on in June last, and on the 16th of that month was flowing the full length of the course. The effect upon the adjacent lands, which are at present under grass, was almost immediate and very marked, and it is readily apparent that such portions of these bottom lands as will this year and hereafter be brought under cultivation, will be decidedly superior to other lands on the reserve not thus privileged.

On the Piegan Reserve, an irrigation ditch three miles in length, with an auxilliary of one and a half miles, has been constructed by the Indians under the supervision of the agent and farmer for the reserve; but, as the work has not yet been completed, it is not possible at the present writing to say what measure of success will attend it. The natural facilities and favourable physical features of the country included in this reserve have rendered possible the carrying out of this undertaking, without the engineering assistance which was necessary in the case of the Blackfoot Reserve works.

Preliminary examinations are about to be made on two of the reserves in the Birtle Agency, with a view to ascertaining whether water can be successfully and cheaply raised from the river to the level of the surrounding bench lands for the purpose of improving certain valuable hay lands, the product of which, from lack of sufficient moisture, has been considerably reduced of late years.

The returns anticipated from the successful carrying out of this work—if it is found to be practicable—will far exceed the small outlay which will be involved, as the Indians find a ready market for all hay that they can dispose of, at good prices.

Surveys.

A small reserve, consisting of about two thousand acres, was set apart, near Prince Albert, for the refugee Wah-spa-ton Sioux who had been for many years resident in the vicinity of that town as trespassers on Dominion and private lands.

In the Birtle Agency a re-survey of the Riding Mountain Reserve, No. 61, rendered necesssary by the obliteration of the original boundaries, was made in the autumn of last year, as also the examination and setting apart of a fishing station for the Indians of that band.

A small reserve of an offshoot of the Gambler's Rand, No. 63, was also surveyed at Valley River, in the northern portion of this agency.

The remainder of the season of 1894 was taken up with the examination of timber lands for the Blood Indians and the taking of levels with a view to ascertaining the practicability of a proposed irrigation system for that reserve.

The season of 1895 has so far been devoted to the irrigation work before referred to, on the Blackfoot Reserve, and the survey of certain hay lands for the Indians in the Swan River Agency.

Reduction of Expenditure.

Notwithstanding the unfavourable result of the farming operations of the season of 1894, the absence of demand for labour and the low prices of farm products and, on the other hand, the continued extension of educational facilities with its corresponding expenditure, there has been a reduction in the sum expended upon Indians in the North-west Territories of about $25,000 as compared with the outlay of the previous year.

Conduct.

Apart from an occasional infraction of the law, arising out of the procuring of intoxicants, which still continue to find their way to the Indians (particularly those residing near the towns and large settlements) in spite of the vigilance of the police and our own officials, the conduct of the Indians of Treaties 4, 6 and the Stonies, Sarcees and Piegans of Treaty 7, in so far as the observance of the law and general behaviour is concerned, has left but little to be desired.

In one respect, however, it is to be regretted that so favourable a report cannot be given. There has been, during the past spring, a tendency on the part of some of the bands of the central, and to some extent those of the eastern portions of the Territories, to return to the observance of their ancient rite of sun-dancing, accompanied, to a limited extent, by the practice of making "braves" and its concomitant acts of torture. In only one instance, however, were the attempts in the central district successful this year, Piapot's Reserve being the only point where a dance was successfully held. An attempt to inaugurate one at Touchwood Hills was firmly resisted by the agent and overcome by prompt action on his part. It is very noticeable, however, that these dances do not now receive the hearty support which in former years they commanded from nearly all the Indians. The attempted dances of last spring were inaugurated by the few remaining members of a class that has now almost passed away, i.e., the medicine men, who still cling to the traditional customs of their race and who are, owing to age and consequent fixity of ideas, beyond the reach of the elevating influences of civilization. The responses to their efforts are now very far from being as general as in earlier years, and come mainly from those who are possessed of but little in the form of landed improvements or property in cattle, etc., to interest them in their reserves and work—on the other hand the industrious owners of good farms, herds of cattle and comfortable homes, perceiving the unsettling influences of these ceremonies and their inconsistency with the teaching of the Christian faith which they have adopted, hold entirely aloof therefrom.

Among the Indians of the west, by whom sun-worship with its attendant rites and ceremonies was in the past most religiously and regularly observed, there has been this year noticeable indications of a similar disinclination on the part of the better class to continue to participate therein, and on the Blood Reserve, where they were of so frequent observance heretofore, through the efforts of the agent these rites were not celebrated at all during the past two seasons, and in the current summer the only sun-dance held in Treaty No. 7 was one of a very mild type on the Blackfoot Reserve. There is, therefore, good ground for the hope of finally bringing about their complete abandonment at an early date, and were it not for the encouragement given the Indians to continue the practice by the attendance at the dances of numbers of white people, drawn thither by curiosity, the advance in this direction would, I believe, be more rapid.

In the case of the Blackfoot Reserve, I regret that the year has not passed free from the stain of crime, the deplorable and tragic death of the late Mr. Frank Skynner, an official of the department on the staff of that agency, and the regrettable but unavoidable killing of his Indian murderer by the Mounted Police while resisting arrest, has cast a deep gloom over the department's staff and the Indians on that and adjacent reserves.

Later, and while the excitement among these Indians incident upon the events which had so recently taken place in their midst still prevailed, there arose, through an unfortunate combination of circumstances which reached its climax in the death of one of the pupils of the boarding school on the North Reserve, a spirit of antagonism towards the school in question, resulting in the temporary closing of the same and the withdrawal from the reserve of the missionary under whose able management the institution had been conducted. A searching inquiry was at once instituted into the causes of the difficulty, and full explanations given to the Indians; and, as a result, I am pleased to state that the school was re-opened during a visit of His Lordship the Bishop of Saskatchewan and Calgary and myself to the

reserve on the 25th August last, at which time it was quite evident that good feeling had been restored.

On the Blood Reserve in the earlier portion of the year, complaints of cattle killing were made by the ranchers in the vicinity of Fort Macleod and the Blood Reserve. Prompt action was taken by the officials of the reserve and the North-west Mounted Police, and the matter was specially investigated by the department's inspectors in connection with its bearing on the question of the insufficiency of the meat ration then being issued, which, it was alleged, was the principal cause of the killing complained of.

The result of the inquiry proved that the ration of meat was, with some trifling exceptions, amply sufficient, and that the killing of cattle was the wanton work of some of the wild and uncontrollable spirits which are ever to be found among the Indians; and through the vigilance of the police the arrest and conviction of the ringleaders and principal offenders among these was secured; since which there have been no complaints heard.

The year has been marked by the continued absence of complications between our Indians and those of the northern United States territory, there having been no attempt to revive the horse-stealing raids which in former years and until repressed by the vigilance and activity of the North-west Mounted Police, were of so frequent occurrence.

Moral and Social Status.

As in the past, the influence of the missionaries, school teachers and our own employees has continued to have a very marked bearing on the moulding of the character of the Indians with whom they are in daily contact; especially is this true in the case of the younger men and women. The effect of the neat premises and well ordered establishments of the missions, agencies and farms on the reserves, in keeping ever before the Indians models which it is desirable they should copy, is very noticeable in the increased attention of the better class of the Indians to the smaller details of house ornamentation, neatness of premises and the adoption of the many ingenious appliances and contrivances which are in so common use among the whites for the facilitating of labour, and this influence has been an important factor in the elevation of the moral and social standards of the Indians.

The tendency to incur debt in anticipation of moneys coming in from various sources is yet strong among the older Indians who have grown up under the credit system of trading which, in earlier years, so generally obtained throughout the Territories. The experience of the past few years has, however, been sufficient to warrant the belief that the time is not far distant when this pernicious system will be at an end; for the more provident Indians of the present generation are beginning to perceive its evil effects and the disadvantage at which it places them, and the rising generation, the product of our reserves and industrial schools, are trained in a better school of finance.

Education.

Notwithstanding the limited appropriation at command for this purpose during the fiscal year 1894-95, the Indian educational system of the territories has not only been maintained in its past strength and efficiency, but in the latter respect some advance, it is believed, has been made. There have been in operation during the year, in the North-west Territories, seventy-nine schools of all classes, of which seven are of the industrial type, fifteen boarding and fifty-seven day schools. The aggregate number of names on the roll at the close of the fiscal year was 2,782, of which 809 were in the industrial schools, 528 in boarding schools, and 1,445 at the day schools.

At the industrial schools the number of pupils enrolled shows an increase of 120 over the previous year, owing principally to the closing of a ew of the reserve day schools and the drafting of the pupils to the industrial schools. A further change for the better in the attitude of the Indians towards the question of the education of

SEWING ROOM, QU'APPELLE INDIAN INDUSTRIAL SCHOOL.

their children is also noticeable, in the fact that parents are less persistent in their demands for leave of absence for or the premature discharge of their children and more willing that they should participate in the benefits which they see are being conferred on the children of others.

A brief summary of the year's work may prove of interest:—

Battleford School.

With the exception of the few chronic cases confined to the hospital, the health of the pupils has been good. The exceptions referred to will, as opportunity offers, be permitted to return to their homes where they will probably be benefited by the greater amount of open air exercise than is possible to them in connection with hospital treatment; at the same time due care will be taken to see that they receive careful attention and regular medical treatment from the reserve physicians.

Five girls of the school are now filling positions as domestic servants—four in Battleford and one in Regina—and are giving good satisfaction. Their wages, or at least such portions as they do not require for clothing etc., are deposited for them by their employers in savings bank accounts.

The school buildings have, during the year, been thoroughly renovated and improved, and a new carpenter shop erected in place of the one destroyed by fire two years ago, and the school is now thoroughly equipped for work. Much of the work has been done by the carpenter apprentices, who are very proficient in their trade. The shoemaking department has done much excellent work and its pupil staff is thoroughly efficient.

Strenuous efforts were put forth to have the school well represented at the Territorial Exhibition, with the result that nearly 100 exhibits were on sight in this school section, all of which were very creditable.

The *Guide* school newspaper, after some months of suspension of publication, is again issued in enlarged form.

The former principal—the Rev. Thomas Clarke—resigned from the management of the institution in December last, after eleven years of continuous connection therewith, and the position was filled temporarily by the Ven. Archdeacon J. A. Mackay until the school was, on 1st July last, handed over to the control of the church authorities on the *per capita* grant basis, when the present principal, the Rev. E. Matheson, assumed charge.

Qu'Appelle School.

The attendance at this school has been more regular than heretofore for reasons before stated, and consequently better results are noticeable.

Accommodation for twenty-five more pupils has been provided, as also additional hospital facilities for cases requiring isolation. Twenty girls have this year found employment as domestic servants in the neighbouring towns, and have given complete satisfaction in that capacity. A number of the boys also have been hired out to neighbouring farmers and have acquitted themselves creditably. Carpentry, shoemaking, blacksmithing, printing, domestic work, baking and the manufacture of clothing have been regularly taught with gratifying success, as the school's exhibits at the Territorial Exhibition proved.

The school was visited during the year by the members of the Central Assiniboia Teacher's Institute, who expressed thorough appreciation of the work and methods of the institution.

St. Joseph's School.

This school is now filled to the extent of its accommodation and not a few applications had to be refused on this account, pending the completion of the addition which is now in course of erection. Owing to the prevailing financial depression and the limited extent of agricultural pursuits in the district in which this school is situated, there was but little demand for labour, and consequently but few pupils

were hired out. All the carpenter work on the additions and the improvements made during the year was, however, done by the carpenter apprentices, under the supervision of the instructor.

The health of the pupils has been exceedingly good, and only three deaths occurred during the year. Steady progress has been made in studies, the pupils being now graded in the following standards :—

	Pupils.
Standard I	64
Standard II	29
Standard III	15
Standard IV	10
Standard V	3

Calisthenics, frequently accompanied by music of the school's excellent brass band, are regularly practised and are an important feature in the maintenance of the health of the pupils. The instruction in the various trades has been attended with considerable success, the carpenter apprentices having performed a large and varied amount of work in a skilful manner. All the boots required at the institution have been made by the shoemaker and his staff of apprentices, as also moccasins and the repairing of boots and harness. The school farm has contributed very considerably, in the shape of vegetables, milk, beef, grain, etc., towards the support of the school.

Regina School.

Decided progress is reported from this school; the kindergarten system recently introduced is proving a very valuable help in the junior department. Special attention is given to instruction in agriculture, and the school farm is regarded as an important department of the institution.

The carpenter boys were kept fully employed at work of a thoroughly practical nature on additional buildings, including a residence for the principal, and in working on the Territorial Exhibition buildings, on which work a number were employed by the contractor at the rate of $1.25 per day. The harness makers have continued to do good work, and have, in addition to filling a number of outside orders, supplied the agencies with twenty-one sets of double harness, besides providing all the school requirements in boots and shoes, leather mitts, shoepacks and slippers.

A printing office was opened in November, 1894, since which time a semi-monthly school newspaper has been issued to the pupils and some 500 paid subscribers. The compositors' work is done by the boys.

Good health has been the rule throughout the year. Out-door work and sports are freely encouraged, and many of the boys have developed athletic qualities of no mean order.

A commencement has been made this year in hiring out boy pupils among the neighbouring farmers; but as yet, only two of the girls have been placed in situations, principally for the reason that none could well be spared from the work of the school.

Red Deer School.

This institution has now its full complement of pupils, fifty in all. Of the trades, carpentry and farming are the only ones at present taught; but a shoe and harness shop will shortly be opened.

A change in the management of this school was made about the end of the fiscal year, the retiring principal, the Rev. Mr. Nelson, being succeeded by the Rev. Mr. Somerset, a missionary of the Methodist Church for some years among the Indians of Hobbema and Edmonton Agencies.

Notable progress has been made during the year in the class rooms, the pupils having made a very gratifying advance in general proficiency.

Emmanuel College, Prince Albert,

has now thirty pupils on the roll, out of which it is intended to fit a number of the more promising ones for a Normal school course in the public schools of the Territories, with a view to enabling them ultimately to qualify for positions as teachers, either on or off the reserves.

No trade instruction is undertaken here, but the girls, in addition to their studies, are given thorough instruction in domestic work, sewing, knitting, &c.

Brandon School.

The Brandon school is now open with thirty eight pupils on the roll, and some seventeen more are *en route* from the reserves. This school is under the management of the Rev. John Semmens as principal, and the auspices of the Methodist Church. As it is only recently opened, no report can, of course, be made thereon.

Calgary.

At Calgary, the building for the new industrial school, under the auspices of the Church of England is approaching completion, and steps are being taken to secure pupils and arrange for the opening; which, however, can hardly take place before the close of the present calendar year.

Elkhorn Industrial School.

The industrial school at Elkhorn, known as the Washakada Indian Home, is under the closer attention which the present principal, Mr. A. E. Wilson, has been able to bestow upon it, gradually approaching its former standard of efficiency, and a more economical financial policy is being pursued.

During the year a few children from the western plain tribes and a number from the Swan River Agency, have been added to the school's population. The trade shops at this institution, while financially unsuccessful, have achieved satisfactory results in so far as the training of the boys is concerned, as was evidenced by the display of their handiwork at the Territorial Exhibition referred to elsewhere in this report.

The importance of out-door recreation is fully recognized here also, with the result that manly sports flourish under the superintendence of the staff, and the strength of the school's rink of Indian curlers last winter, earned for them renown among the "brethren of the broom."

The reputation of the Indian industrial schools of the Territories for the excellence of the work which they are performing and their importance as factors in the undertaking of converting tribes of formerly uncivilized Indians into independent and useful citizens of the Dominion, has attracted towards these institutions the attention of a large section of the Canadian public, as also of many distinguished visitors from other countries.

Among those who have recently visited one or other of these schools and who have freely expressed appreciation of the service being rendered to the country by these institutions and the high standard of efficiency maintained, I may note Their Excellencies the Governor General and Countess of Aberdeen, the Hon. Sir Mackenzie Bowell, the Hon. the Minister of the Interior, the Hon. Wilfred and Madame Laurier, His Honour Lieutenant-Governor Mackintosh and Messrs. J. Sutherland, M.P., and D. C. Fraser, M.P. The interest thus shown and the many kindly words of appreciation and encouragement conveyed to the pupils and staff of the schools, has had an effect for good, the extent of which it is not possible to estimate.

The various boarding schools have throughout the year continued to render as good service as can be expected from the institutions conducted in the midst of Indians, and where the separation of children from objectionable influences cannot,

by nature of the circumstances, be as effective as where they are removed from the reserves entirely and placed in the industrial establishments. However, as before said, they are doing good work and it is pleasing to note that this is sufficiently appreciated by the Indians to have caused all the schools, except in one or two instances, to be filled to the limit of the enrolment for which parliamentary appropriation has been made, in fact, in some few cases it has been found impossible to refrain from exceeding that limit.

The day schools have maintained their former degree of efficiency. During the year, in pursuance of the gradual withdrawal from the system of day schools, some of the least effective of these were closed and the pupils drafted into the boarding and industrial schools.

Health.

There has been a general immunity from sickness of an epidemic nature, la grippe having only, as far as I can recall, manifested itself in one agency and there, though in a comparatively severe form, not accompanied by loss of life.

As a result of inquiry among physicians who have been in constant attendance upon the Indians for many years, it is gratifying to learn that there is good ground for belief that syphilis has now been in so large a measure brought within the operations of successful treatment as to be said to be disappearing.

Scrofula and consumption still retain their position as the main factors in the death rate among the Indians, the one leading to the other, and there seems to be little ground for hope that their potency will be in any appreciable degree lessened by treatment.

The continual improvement in surroundings, the better houses, a more varied diet (including the increased use of vegetables and decrease in the consumption of meat) together with a more intelligent appreciation of sanitary precautions which are so constantly enjoined upon them by the reserve officials, will, however, it is hoped, in conjunction with skilled medical treatment, in time be productive of no small results.

The sanitary precautions referred to consist in the thorough cleansing of the dwellings and the surrounding premises twice a year, the whitewashing of all houses at least once a year and their proper ventilation, the removal and destruction of all garbage and refuse matter, the keeping free from pollution all sources of water supply and a general attention to the cleanliness of the person, especially among the children.

It may be said that not a little of the success achieved in this work has been contributed to by the presence on the reserves of the ex-pupils of our industrial schools, who, having finished their term of schooling, are now again with their parents, or married on the reserves, where the influence of the training which they have received is now being brought to bear upon those with whom they are thrown in contact.

Staff.

It affords me pleasure to testify to the cheerful co-operation and intelligent assistance rendered generally by the staff throughout the agencies and in this office in carrying into effect the policy of the department.

To a very marked extent has there been apparent a deep personal interest in the service and a general desire to hasten, by all means in their power, the day when our country's wards shall have become its citizens.

Conclusion.

The usual statements accompany this report.

Manitoba matters will be dealt with by Mr. McColl, whose report will cover also the St. Boniface and Rupert's Land Industrial Schools.

I have the honour to be, sir,

Your obedient servant,

A. E. FORGET,

Assistant Indian Commissioner.

Department of Indian Affairs.

TREATY NO. 2, MANITOWAPAW AGENCY,
THE NARROWS, LAKE MANITOBA, 12th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the fiscal year ended 30th June, 1895.

The Indians on the several reserves in this agency are in a fairly prosperous condition, and maintain themselves by hunting and fishing in the spring, summer and winter seasons; and in the fall, some by hiring on farms in the Portage la Prairie Plains, where they find employment during haying, harvesting, and threshing times; others find work in winter in the lumber shanties and saw-mills at Fairford; all of which is a great help to them, and therefore few of them such as old, blind and infirm Indians, and widows, have to be relieved during the winter months.

In this connection I am happy to state that charitable persons and societies, through the Church of England missions in the agency, have materially helped the children, and the aged and destitute of Crane River, Fairford, Little Saskatchewan and Lake St. Martin Reserves, in procuring them suitable clothing during the year, but especially in the winter season.

The crops in general, but particularly that of potatoes, were a success, except at Ebb and Flow Lake, where, owing to high water, wet seasons and low country, mostly everything failed excepting hay, which was plentiful in every reserve of my agency; consequently the stock is increasing and improving.

I am glad to say that, by marked degrees, the Indians are becoming more and more industrious and economical, and the gratifying result to which I have much satisfaction to draw the attention of the department, is the fact that some of them can dispose of from five to fifteen head of good beef cattle every fall; and others, with hardly any or no help from the government, have in the course of the year, bought wagons, mowers and rakes, for which they have paid ready money, earned mostly by their labour and thrift.

The progress made at the ten day schools in my agency is satisfactory, although in some of them the attendance was not very regular, owing to different epidemics which raged in the spring more or less in every reserve, but more paticularly in the Little Saskatchewan, Fairford and Lake Manitoba Reserves, where, I am sorry to say, a few fatalities were recorded; but, thanks to the medicines provided by the department and administered by the school teachers, who act as health officers, the cases of mortality were lessened.

A new boarding school has been established at Pine Creek under the direction and tuition of one of the Reverend Oblate Fathers of the Roman Catholic Church; and, together with that of Water Hen River, under the same patronage, but beneath the immediate charge of Mr. and Mrs. Adam, I am happy to state that the pupils of both these schools have made marked progress in learning both French and English, and would compare creditably in their habits of neatness and cleanliness with their more favoured neighbours the white children.

The girls under the conscientious and intelligent care of Mrs. Adam learn the useful arts of housewifery, sewing and knitting, and are able to make their own socks, stockings, mitts, dresses, &c., &c., whilst the boys are taught the rudiments of husbandry; and the pupils who show more aptitude for study are affiliated with the Industrial School at St. Boniface, where one of them has shown so much talent that he was chosen to be sent to the principal institution in Ottawa to complete his studies. And I feel it to be my duty to mention also the brilliant honours obtained in the past at the St. Paul Industrial School by the pupils coming from Fairford and the neighbouring schools. This goes to show that the large amount of money expended yearly by the department is conducive of very beneficial results, notwithstanding the too many objections of outsiders. Moreover, these results are fruitful of one more important advantage, that of overcoming gradually the ignorant obstinancy of the Indian parents who at first pretended that the schools were use-

less, and were very indifferent as to whether their children attended school or not; but now, owing to the above convincing proofs, they begin to understand that there is some usefulness in education and encourage them to attend more regularly.

The houses and outbuildings continue to have a more improved and healthier appearance, the Indians following more readily than heretofore the sanitary instructions given them, through the school teachers, by Dr. Orton, the chief medical superintendent, who also remarked, with satisfaction, those improvements at the time of his last visit, when he took the trouble of vaccinating the infants and adults who had not been previously operated upon. This was done on all the reserves in my agency, when he also prescribed and gave medicine to all the Indians who applied for treatment. Consequent upon the better observance by them of the sanitary regulations the health of the Indians in general is good.

This year the hunt has been fairly remunerative, bears particularly having increased in numbers; but, although fish was plentiful, the Indians caught just enough for their own use, as they could find no market to dispose of the surplus with profit.

I am happy to state that, as in the past, my staff of teachers continue to prove efficient and are a great help to me in caring for the implements and government property in general, in their efforts to induce the Indians to till the soil and improve their stock (my agency being so well adapted for that purpose), in visiting the sick and administering in my stead the medicine adapted to the case, and, in fine, in cheerfully seconding me in the rather ingrate task of trying to instil in them the practice of the domestic and moral qualities of civilized people.

Before concluding I feel it to be my pleasant duty to say that, if satisfactory results have, thus far, been obtained from the Indians in my agency, they are due in a great measure to the close and able supervision of our Assistant Commissioner for Manitoba, Keewatin and the Northwest Territories and the Inspector of Indian Agencies, Mr. E. McColl, who, through his long years of patient intercourse with them, has come to understand thoroughly the character of the Indians, and now exercises such a salutary influence upon them that his orders are strictly carried out and his advice always gladly received and put into practice as much as they possibly can.

I have the honour to be, sir,
Your obedient servant,

H. MARTINEAU,
Indian Agent.

INDIAN RESERVE COMMISSION,
VICTORIA, B.C., 24th September, 1894.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit for your information a report of the proceedings of the Indian Reserve Commission during the past year, and of the work done by the two surveyors attached to it during a part of the year.

Messrs. Devereux and Skinner, the gentlemen I refer to, were until January employed in plotting the surveys of their preceding summer's work, and in preparing, for the final approval of the Provincial Government, plans of reserves previously surveyed by them.

On the 8th January, Messrs. Devereux and Skinner were, by your instructions, temporarily discharged, for the reason that the funds for the survey branch of the Commission were exhausted. A large amount of office work was consequently left unfinished, and it is now being carried on by Mr. Green whenever his other duties permit.

The Reserve Commission has during the past season defined ten additional reserves in the Lillooet district for the Alkali Lake and Canoe Creek tribes. These are for the most part, meadow lands, which are much needed by the Indians for their increasing bands of cattle and horses.

I am glad to inform you that the above reserves have all been approved by the Provincial Government, under date 23rd instant, and are now ready for survey.

The unfinished field work, referred to in my annual report of last year, and which I have been unable to deal with in consequence of there being no available funds, comprises the additions and extensions to the reserves for the Nicola Lake, Sliammon, Klahoose, Euclataw and Clayoquot Indians, situated partly in the interior of the mainland and partly on the coast.

Applications for additional lands are of late frequently made by Indians whose herds of cattle and horses have become more numerous, and these applications will have to be dealt with by the Commission.

The surveys that remain to be undertaken are those in the coast and Cassiar districts, and they may under favourable circumstances; be finished by the two parties in a year. To these must be added the unsurveyed reserves within the railway belt, and those allotted by me during the past season, which will probably occupy a party three or four months; and I beg strongly to recommend that these surveys be completed without delay.

I have the honour to be, sir,
Your obedient servant,

P. O'REILLY,
Indian Reserve Commissioner.

DISTRICT No. 8,
EUREKA, N.S., 1st October, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to present my annual report and tabular statement for the year ended 30th June, 1895.

The condition of things in this agency has not changed very much since my last report.

The loss, by storm last fall, of the church on Indian Island has been a serious blow to the poor Indians of this district. They have erected a temporary chapel near the old site which will have to do until such time as with outside assistance they are able to rebuild.

There is at present very little sickness here among the Indians. The lack of sufficient clothing during the cold winter is largely the cause of sickness, and brings on consumption, to which they are predisposed.

The potato crop looks very well, and will be of great benefit to those who have planted. It is difficult to induce them to take an interest in farming unless they get assistance from the government. There are, however, a few families who realize the benefit derived from it. The great drawback in farming among them is the want of manure. They have no money to invest in chemical fertilizers, which are expensive.

I have the honour to be, sir,
Your obedient servant,

RODERICK McDONALD,
Agent.

DISTRICT No. 9,
HEATHERTON, ANTIGONISH Co., N.S., 12th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended 30th June, 1895.

There has been an increase of seven in the population of this district during the year, ten births and three deaths.

The health of the Indians was generally good, there being no deaths among the adults, but an epidemic of scarlet fever caused considerable suffering.

There has, however, been more than a usual number of very aged and infirm who had, and still have to be supported by their relatives and friends, supplemented by a small amount from the government.

The attention given to agriculture is about the same as in former years. Hay and potatoes are the chief products.

Those who do not own stock, and they are the majority, sell their hay and thus derive a certain income; but their chief means of support is derived from raising potatoes. Some raise a considerable quantity of them, and in time of need they charitably divide with the destitute among them, and hence have little left for seeding.

The Indians of this agency have a very beautiful little chapel on their reserve at Summerside. It is situated in a most charming locality overlooking the waters of Pomquette harbour. They had it painted and repaired last fall, and during their annual festival of St. Anne's, on July 26th, the visitors to their reserve were charmed and delighted at the elegance and taste displayed in beautifying the interior of their church. As a rule they are pious and moral, and generally temperate. There are, however, occasional cases of drunkenness, but the stern enforcement of the law respecting the sale of intoxicants to Indians acts as a needed preventative.

I have the honour to be, sir,
Your obedient servant,

W. C. CHISHOLM,
Indian Agent.

MANITOBA SUPERINTENDENCY,
OFFICE OF THE INSPECTOR,
WINNIPEG, 4th October, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—In submitting my eighteenth annual report of inspection, I have the honour to congratulate the department upon the material advancement in civilization manifested everywhere throughout this superintendency under the liberal and progressive policy adopted by the government in elevating the aboriginal inhabitants of Canada to the moral and intellectual plane of the European race, whose wonderful inventions and discoveries, in the arts and sciences, have given muscles to steam and a tongue to the lightning, and almost annihilated time and space.

The knowledge disseminated through the excellent educational institutions established for the enlightenment of our untutored aborigines is gradually illuminating their benighted understandings with its glorious effulgence and dispersing the clouds of ignorance and superstition which have enshrouded them mentally for countless ages, while aimlessly groping in impenetrable darkness. The wheels of

progress laden with the peaceable productions of civilization are moving slowly, but effectively among those implacable savages and transforming them into useful and industrious citizens, who formerly revelled in carnage with fiendish delight and adorned themselves with the ghastly scalps of their mutilated victims. No stone-walled fortresses, nor palisaded inclosure, armed with rifles and cannons, are necessary now for the protection of life and property from the attacks of hostile Indians in the vast unoccupied territories of the Dominion.

In my inspection of the different agencies visited this season, I was pleased to observe the general prosperity and contentment prevailing among the Indians. The acreage under cultivation on the majority of the reserves is considerably larger and the various crops are generally better than I ever witnessed them on any previous occasion. Grazing along the grassy banks of rivers and lakes, on many of the reserves, herds of cattle, in excellent condition are frequently seen. Old animals are exchanged for wagons, mowers, or for younger stock. Good and comfortable dwelling-houses, provided with several compartments amply furnished with chairs, tables, spring-beds, mirrors, cupboards, kitchen utensils, cooking-stoves and other modern conveniences, are now frequently substituted for the rudely constructed thatched and mudded hovels, and the blinding and suffocating barbarous wigwams formerly occupied.

Groups of children neatly attired in gaudy fabrics are observed each morning, tripping merrily along the different trails leading to their respective schools, where instruction is given them in the fundamental principles of education, instead of their growing up, like their heathen ancestors, in grossest ignorance around their filthy camp fires.

In the Portage la Prairie Agency, the Indians are making marvellous achievements in agriculture. Under the practical and judicious management of Mr. Agent Ogletree, they have harvested the enormous quantity of 8,460 bushels of wheat, 400 of barley, 1,000 of potatoes, 100 of corn, and about 500 tons of hay. In addition to this they gathered several thousand dollars worth of seneca, or snake-root, and received $750 for working with farmers. They own 80 horses, 73 head of cattle and 29 dwelling-houses.

In the Clandeboye Agency, the Indians are also progressing in agriculture most satisfactorily. Their industry this season is bountifully rewarded by an unprecedented yield of wheat, barley, oats, corn, beans, potatoes, turnips, onions and carrots. They secure from their magnificent meadows upwards of 4,000 tons of hay yearly, a large portion of which is disposed of in Selkirk and Winnipeg, at remunerative prices. Their live stock consists of 129 horses, 1,066 head of cattle, and 171 pigs. They realized from the proceeds of hay, cordwood, furs, seneca root and berries, disposed of during the year, $17,900, besides a large amount received for working at harvest, saw-mills, fisheries, on steamboats and as voyageurs. It is estimated that the value of fish caught amounted to $12,500.

The great interest manifested by parents in the education of their children is an encouraging indication of their intellectual advancement from barbarism to civilization. Of the 471 children of school age belonging to this agency, 424 are attending either day or industrial schools, which are ably conducted by efficient instructors, of whom Mr. McDougall, of St. Peters, is a distinguished ornament of the profession.

In the Manito-wa-paw Agency, the Indians are principally engaged in stock-raising and in the cultivation of cereals, vegetables and roots. They produced this season 140 bushels of wheat, 205 of barley, 82 of corn, 225 of oats, 15 of pease, 4,645 of potatoes, and 100 of turnips, 119 of onions, 81 of carrots and secured 3,569 tons of hay. They have 216 dwelling-houses, 121 stables, 13 mowers, 195 agicultural implements, 166 horses, 1,050 head of cattle, 20 pigs and 8 sheep. The proceeds of their hunting and fishing amounted to $9,587. These resources are supplemented by employment obtained from different parties at farming, lumbering and other occupations.

The progress in learning made by the children within this agency during the year is creditable to the teachers in charge, especially to those conducting the boarding schools at Water Hen River and Pine Creek.

Mr. Martineau is a most energetic and competent officer, whose long experience in dealing successfully with Indians, admirably qualifies him for the responsible position of agent.

Affairs in the Pas Agency have not been considered as satisfactory as desirable for several years past, in consequence of the mistaken philanthropic impressions inculcated in the district, by interested manipulators and over-zealous, extravagant enthusiasts, that the department is obliged by treaty stipulations to supply unlimited quantities of food, clothing, twine, ammunition, tools, implements, seeds, cattle, &c., to indolent and improvident Indians, who are as capable of providing for themselves and families the necessaries of life as other citizens of the community. I am happy, however, to report that there are noticeable improvements recently on the reserves. Larger fields of potatoes are planted, more commodious dwelling-houses erected and cattle better attended to. On nearly every reserve the Indians hewed about eighty pine or tamarack logs for new school-houses, as the present buildings are tumbling down with age.

The seven Indian bands in this agency have 175 dwelling-houses, 88 stables, 892 implements, 12 horses and 307 head of cattle. The value of furs obtained amounted to $12,000 and of fish $5,500. They received from other industries, $2,089.

The schools are carried on in a listless and perfunctory manner, consequently there is no appreciable development of the intellects of the pupils. A commendable exception, however, is apparent in that of Chemawawin recently conducted so efficiently by that brilliant and accomplished educator, Thomas Lamb, who has so wonderfully advanced his scholars during the two quarters he was teaching there that the Indian agent promoted him to the Big Eddy school.

In the Beren's River Agency, the Indians are under the absolute control of the agent, whose instructions are implicitly carried out, as his influence among them is great on account of his thorough knowledge of their language and character. Fisher River is the only reserve within the agency where any substantial progress in farming and gardening is discernible. Here a variety of cereals, roots and vegetables is abundantly grown, whereas on the other reserves there is very little produced beyond a few bushels of potatoes, as the area of arable land is too limited for extensive cultivation by the Indians. Hence their principal source of subsistence is derived from their fisheries and hunting grounds; but, notwithstanding these unfavourable circumstances, they have succeeded in supporting themselves without any material assistance from the government. They possess 310 dwelling-houses, 135 stables, 2,008 implements and 343 head of cattle. They caught $6,265 worth of fish and $24,400 of furs. The schools in operation are being fairly conducted, especially those at Rossville, Beren's River and Fisher River, where thoroughly trained qualified teachers are invariably employed. There are 597 children between the ages of six and sixteen years within the agency, of whom 463 are attending school. The agent compels every able family on the reserve to supply yearly one cord of firewood for warming the children, and therefore upwards of 300 cords are neatly piled at the different school-houses.

There is scarcely anything cultivated on the reserves in Treaty No. 3, excepting corn and potatoes, of which large quantities are grown on Rainy River, Lake of the Woods, Wabigoon, Lac Seul, Islington and at the Dalles. The Indians within these agencies chiefly subsist upon the proceeds of their gardens, rice fields, fisheries and hunting grounds. They own 407 houses, 90 stables, 1,577 implements, 76 horses and 199 head of cattle. They caught $6,646 worth of fish, and $25,277 furs, and received $10,990 from other industries. Only thirteen schools, indifferently patronized, are in operation among the thirty bands occupying this vast district. Two-thirds of the Indians are uncompromising heathens, who have for generations successfully resisted all the combined efforts of missionaries to christianize them. It is universally conceded by everybody conversant with the administration of Indian affairs in West Algoma that the department is largely indebted for their satisfactory

and economical management to the inflexible integrity of those sterling veteran officers, Messrs. Pither and McIntyre.

I cannot conclude this report without giving expression to my unqualified appreciation of the admirable policy of the government in establishing industrial institutions for practically training Indian children, whereby they may become useful and independent factors in the community for increasing the happiness and prosperity of humanity. Those attending at St. Paul's and St. Boniface are progressing favourably, considering the difficulties encountered at the beginning in securing pupils and retaining them there a sufficient time to accomplish the desired object, in consequence of the incessant importunities of their parents to take them away home. The result of the farming operations at the former school amounted to 50 bushels of wheat, 450 of oats, 80 of barley, 450 of potatoes, 250 of turnips, 20 of carrots, 20 of onions and a quantity of other various garden productions; and at the latter school the following quantities were realized from this season's cultivation, viz:—100 bushels of wheat, 57 of oats, 28 of pease, 22 of barley, 8 of beans, 40 of corn, 5 of flax, 900 of potatoes, 1,000 of turnips, 1,000 of mangold wurtzel, 65 of carrots, 15 of beets, 60 of onions and 500 heads of cabbage.

I have the honour to be, sir,
Your obedient servant,

E. McCOLL,
Superintending Inspector.

FORT QU'APPELLE, 12th August, 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my tenth annual report of my inspection of Indian agencies and reserves, during the past year in the North-west Territories.

My work commenced with Carlton Agency where I arrived on 9th July, 1894. Mr. Hilton Keith is agent, Mr. W. H. Halpin, clerk, Rupert Pratt, teamster, interpreter and farmer, and Wm. Giles, miller and machinist. The agency buildings were in the best of order, having been painted and whitewashed and the whole place was neat and tidy. The agent had a good garden. A few repairs had been made in the agent's house during the year. A pasture of thirty-five acres had been fenced in for the agency horses; it takes in part of the creek and bluff, affording excellent shelter as well as a constant supply of pure fresh water. A neat little house had been put up for the interpreter. The new house for the clerk had been completed and it is a comfortable building.

Muskeg Keg Lake Reserve, No. 102,

was the first visited, Louis Couture, farmer, having been transferred from Touchwood Agency. The farmhouse and other buildings were in good repair, good garden and crop of vegetables looking very well. A pasture of about eight acres had been fenced for the farm horses, and a well was dug. A number of fork handles, whiffletrees, axe handles, bob sleighs, jumpers, hay racks, were noticed, made by the Indians. The crop put in was fifty-four and a half acres of wheat, oats, barley, and roots, being eight and a quarter acres less than the previous year. I visited each house and field on the reserve. The houses were found to be cleanly kept and all rubbish swept up and burnt. There are good stables. The fields were not showing very well, but later rains would no doubt improve the crop. Some summer-fallowing was being done and a good deal more would be required to be done in order to rid the fields of weeds, which have completely overrun them. The root crops

look promising and the gardens were well weeded. Four families make butter The herd numbers fifty head, as against forty-five the previous year, and in private stock, four head and eighteen horses. The cattle are in good condition. The fences were good. Some hay was on hand left over from the past year. Some of the houses have two divisions and upstairs rooms, which showed an advancement in housekeeping. Seven hundred logs on this reserve were sawn into lumber, producing thirty-five thousand feet, which the Indians were making good use of in fixing up their houses. The ploughs had been taken to the agency during the winter for repairs, some new beams, others handles, and all were painted, making them look as good as new. An inventory was taken of property in hands of farmer, and books examined, and Mr. Couture was found to be active in his work and correct in his accounts. This reserve is admirably suited for stock-raising, there being abundance of hay and water and the herd should increase more rapidly than it has done in the past.

The next reserve visited was Ah-tah-ka-koop's, No. 104, under the immediate care of the agent. The crop put in on this reserve was: wheat, 130 acres; barley, 17; oats, 39; potatoes, 3; gardens and turnips, 5; total, 184—being 18 acres less than the past year. I visited all the houses, fields and gardens. The houses are cleanly and neatly kept; gardens were weeded and fields looking well, having been much improved by late rains. Fences were particularly good. All rubbish had been cleared up; an improvement in this respect can be noticed every year, and shows that what has been so often told them is being acted on in nearly every case. The potato crop was good, as the potatoes had been well attended to, being free of weeds. Turnips were sown broadcast and were not so clean. Some new breaking had been done, and summer-fallowing was being carried on. Where summer-fallowing only consists of one ploughing in June and fields left alone, it only helps to cultivate weeds. After ploughing, the field should be harrowed and harrowed until the weeds are completely killed. Better properly fallow ten acres than fifty only half done, which, I regret to say, is too much the case, not only among Indians, but with white people also; hence the country is overrun with weeds. That these weeds can be driven out there is not the shadow of doubt, as I have seen where practical farming is followed whole farms as clean as a well kept garden.

Wm. Cardinal, one of the band, acts as instructor for Mr. Keith in his absence, on both sides of the lake. This man keeps his books in his own way, and is wonderfully correct in knowing all about implements and other property on the reserve. He has a fine house, has good stables and corrals, and his implements are nicely stored away. His children attend school regularly. This man is thrifty and enterprising. The chief's son has a very fine place; a good field of oats, 11 acres was noticed; good potatoes and garden; new fencing. He has a dairy, and a number of milk pans filled with milk were noticed. This man is thrifty. One of the new bulls was seen here and he was a splendid-looking animal. The house was clean, and the whole appearance of the place was one of thrift and comfort. The chief's house has been clapboarded on the outside, as I had requested the year before. This made the house warmer, besides adding to its appearance. The other houses were also found clean and comfortable, and good stabling in every case. The mission buildings were about the same as last year. The church needs painting, badly. Rev. Mr. Settee, missionary, was about leaving for the Pas mission, Cumberland.

The herd is a fine one and numbers 290 head, as against 239 last year. In private stock the band has 32 head of cattle and 41 horses, and some very good pigs, and many of the Indians have poultry. The herd is held by 41 families, and the cattle were properly branded and entered in cattle record books.

Logs were being sawn into lumber, and it was proposed to put up a shed on the edge of the lake so that sawing could be carried on in wet as well as dry weather, as well as being a protection to the machinery. This reserve was in good shape—cattle, fences, houses, stables, being all that could reasonably be desired, and crops bid fair to be an average yield; but more pains would have to be taken to have the fields brought into better condition than they have been in for some time past. The land is good, but it needs preparation in order to ensure a good crop.

Mistawasis Reserve, No. 103,

was next reached. The crops here also were improving fast owing to the late rains. The acreage under crop was 114¾ acres, wheat, oats, barley, potatoes, turnips and gardens, being 30¼ acres less than the previous year. The houses are of a good class and, on the whole, kept very well. The graveyard near the church was in the same dilapidated state it was in at my last visit, but efforts were to be made to have this eye-sore remedied, and I heard that this was done shortly after my visit. The church and mission buildings were in good repair; roof of the church needed painting. The school-house had been improved, roof re-shingled, new floor put in and ceiling sheeted with dressed lumber, making it a comfortable building. Chief Mistawasis' house had been re-thatched and otherwise put in order. The old chief, as usual, was glad to be called upon. He is getting very frail and is not able to attend to any farming, not even a garden. His wants, I was glad to see, were well attended to by Mr. Keith, and the old man was not overlooked in his closing years in this life. The chief never failed to be in his place in the church, and he always took his accustomed seat in the choir.

A good deal of new breaking and summer-fallowing was being done, and the Indians were more or less busy. On the whole I did not notice much improvement on this reserve. Some advancement could be noticed in better fences, and in some of the houses and stables; but in their style of farming they have not improved as fast as they should. The reserve is a good one, the best of land, and there is no reason why they should not raise more in crops than they do, except their own laziness. There are some good workers, however, in the band. The herd numbers 199 head as against 171 the previous year. The cattle were in the best of condition. In private stock the band has 28 horses, 2 oxen, 7 cows and 4 young cattle. The 199 head are held by 25 families. The grist-mill was in good order; the walls have been roughcast and whitewashed, and the roof painted. A brick chimney had been put in. The engine and boiler had been removed to Sandy Lake, to run the saw-mill. There is a small blacksmith shop wherein any repairs are made, near the mill, and the miller's house is near here also. The warehouse had been well kept, and the goods from Regina had arrived in good order. The flour from Joyner & Elkington, Qu'Appelle, was of choice quality, and so was the bacon from Lawry & Sons, Hamilton, Ont. The office work was carefully attended to by Mr. Halpin, the clerk, and books were all written up. An inventory of contents of warehouse was taken and books balanced. The new house for the clerk is 20 by 22, and a wing for kitchen, 14 by 16, one large room downstairs and three upstairs, good cellar, painted roof, and is prettily situated on rising ground surrounded by bluffs. The plastering was done by one of the Indians, and he did the work very well. There is a small stable which the clerk built himself. The following quantities of flour had been gristed during the past winter:—

Ah-ta-ka-koop	17,152 lbs.
Mistawasis	5,989 "
Petequakey	415 "
Agency	10,061 "
Duck Lake Agency	15,524 "
Settlers	27,752 "
Total	76,893

equal to 2,176$\frac{11}{60}$ bushels wheat. The mill accounts are correctly kept and an intelligent statement can be arrived at with little trouble.

Band 105.

The Indians of this band live by fishing and hunting and get little or no assistance from the government. They have a school, but it has not been visited for some time. They have a few head of cattle and they put up hay. They raise potatoes and turnips.

Band 106.

Those who reside at Stony Lake make a fair living by hunting and fishing; bears were plentiful the past winter. These Indians are healthy. The day school has been closed, and some of the pupils sent to Battleford Industrial School. The agent visited them in January, 1894; also in May, 1894. A portion of the band live at White Fish and Devil's Lake, and make a living by hunting and fishing. They also make birch baskets, milk pans, fancy boxes, and fork and axe handles, which they bring to the agency from time to time, and when in need they get a little help in the way of provisions; one man brought in 50 bark milk pans, during the time of inspection.

Pelican Indians.

These Indians also make a living by hunting and fishing, and did fairly well last year. They required assistance, owing to the new fishing regulations operating against them. The births and deaths for the past year were:—

	Births.	Deaths.	Pop.
Band 101	.....	2	141
Band 102	3	2	74
Band 103	10	6	146
Band 104	7	7	213
Band 105	.....	.....	63
Band 106	.....	1	99
Pelican Lake	.....	.....	41
Totals	20	18	777

The health of the Indians at time of inspection was very good.

Sturgeon Lake, Reserve No. 101,

was inspected on returning to Prince Albert. The reserve is under the charge of Mr. A. J. Coburn, and has made very good progress since he took charge. The crop put in was 46½ acres, being 24½ more than the previous year, and on the new Sioux Reserve which is also under Mr. Coburn's charge, four acres of wheat were sown, two and a half acres of potatoes planted, and one and a-half acres of garden. The herd of cattle numbers 34 head; balance last year was 35, one cow killed for beef, leaving 34. Calves of 1894 had still to be added. In private stock the band has 21 horses, 3 oxen, 2 bulls, 16 cows, and 11 young cattle. The farmer has four oxen and two horses, and the Sioux Band four oxen. The fences have been much improved. The gardens were well weeded and looked very well. Two kilns of lime had been burnt, the houses were whitewashed, and Indians had lime to sell. A new house for the farmers was about being completed, 18 by 24, and Mr. Coburn did much of the work himself. It has a lean-to kitchen, 18 by 12, a good cellar, and it is one of the best built log houses I had seen. He also put up a small store and ration house, 17 by 17, also log and shingle roof. The farmer had a good garden and will have potatoes for some old people who have none of their own, besides putting aside 150 sacks for seed.

The new buildings are on the west side of the lake and are beautifully situated, as they command a splendid view of the country around. There is a never-failing spring in the vicinity. Haying was about commencing, and there was an abundance of it. Thousands of tons can be had on and close to the reserve. If they had machinery to handle it, a good deal could be made putting up hay for sale. A tender was being put in to supply the Police at Prince Albert. Fish was plentiful, and small fruits were in abundance. This is one of the best reserves we have, but the Indians have never had a chance of a man being constantly among them, and now that a most capable man has been permanently placed there, there is every reason to hope that a great change will be noticeable in a short time. If all our farmers were as active and practical as Mr. Coburn, there would be a revolution in the farming work that would be astonishing.

Five or six widows have little gardens in one field, and they take good care of them. The farmer asked for a cow for the use of these old people, which I presume was granted. The chief had a splendid showing in his garden of potatoes, turnips, onions, carrots, cabbage, corn, &c. He took pride in showing these. What a contrast to what it was two years before—nothing but weeds! He said he and his people were glad that they had a man to show them how to work. Three new houses have been built on the reserve during the year. The Indians make axe and fork handles, ox-collars, whiffletrees and sleighs, and some of the women make butter. They are a nice lot of Indians, and are industrious and anxious to get along, and I was much pleased with signs of activity to be noticed all around. The new building intended for a boarding school for Indian children was about being completed. It is 34 by 16. Downstairs is the living-room and kitchen, and upstairs, teachers' room and dormitory for girls. The old building will be used entirely for school purposes downstairs, and the upper part as a dormitory for boys. The living-room in the new building will be used also as a dining-room until a lean-to kitchen is built. The building was expected to be opened in August, with ten boarders. The Church of England mission gave $100 towards the building, and for the balance Mr. Parker is personally responsible, and expects assistance from friends in England. There is a store-house and a good garden. Several bales of clothing were on hand, gifts from friends in the east. The day school had been closed since 20th April, 1894, owing to the building operations going on. The Indians are now favourable to the school, and even the chief, who was a determined opponent, feels well disposed, and promises to send his children. Mr. Parker does missionary work on the reserve, and reports them a nice lot of Indians. As the bulk of the families live at the head of the lake, some five or six miles off, it was impossible to get a regular attendance at a day school, so that a boarding one was a necessity, unless sending the children to Battleford, and it is said the Indians positively objected to this. New farm books had been opened for this reserve, and these I examined, and took an inventory of property in the hands of farmer. Mr. Coburn took charge on 10th April, 1894, and he has accomplished a large amount of work in a short time. Mrs. Coburn is also very active and loses no opportunity to help the women in various ways: visiting them and their children when there is sickness, and encouraging them in observing cleanliness in their housekeeping.

The new Sioux Reserve was visited on my way to Prince Albert. Mr. Ponton was busy cutting out a line, the location is a grand one. They had six or seven acres in crop of wheat, potatoes and turnips, all looking very well. Six acres of new fences were made. Twenty-two acres of new land were broken and they were preparing to build their houses, the logs being on the ground for the purpose, and were only waiting for Mr. Ponton to lay out the ground. The school building at the old reserve was expected to be removed to the new place and to be used as a dwelling for the teacher, and a new building put up for a school. These Indians are industrious and well behaved and there is every reason to believe that they will make a good living on their new reserve. Miss Cameron is the teacher, having succeeded Miss Baker, who took such a warm interest in this band. Miss Cameron is equally interested and seems to have won the confidence and respect of the Indians, young and old. This reserve is also under Mr. Keith's management. The Carlton Indians made

a great deal of money gathering seneca root, they got 20 to 25 cents a pound for it. Mr. Keith continues to discharge his duties with his usual energy and carefulness, and no detail is overlooked by him. The usual inventories, statements and returns, with detailed report, were forwarded to the Indian Commissioner, Regina.

The next agency inspected was

Duck Lake,

having telegraphed Mr. McKenzie to meet me at Prince Albert so as to take in John Smith's and La Corne Reserves, before going to the agency, thus saving eighty miles extra driving. My inspection therefore commenced at John Smith's Reserve on 30th July, 1894. Mr. Justus Willson is the farmer in charge. The new farm house was being completed and would be ready for occupation in a few days, it is 24 x 22, one and a half story, log, plastered and whitewashed outside, and lathed and plastered inside, double floored, a good cellar and ceiling, sheeted with dressed lumber, shingled roof and painted red, two brick chimneys. On the ground floor there are two rooms and hall and upstairs three rooms and hall or landing. A lean-to kitchen 14 x 16, also of logs, and plastered. The old store-house had been pulled down and the logs used for a new stable. The farmer was putting up a new fence in front of the buildings. The crop put in on this reserve was: wheat 96 acres, oats 89, barley 7, potatoes, 4¼, turnips 1, carrots and onions 1, (gardens 16,) or 2½ acres; total acres, 200¾, being 51¼ more than the previous year. The houses, stables and fields were all visited. The houses are of a good class and are cleanly kept as well as clean on the outside, and all had been whitewashed. The crops were looking very fair. The straw in some cases would be short, but heads were good and an average crop would be the result. The farmer calculated he would have 3,500 bushels of grain, and I understand he had at threshing within 150 bushels of this quantity. Harvesting commenced here on 6th August, which was about twelve days earlier than usual, with haying going on and harvesting also: the Indians were busy. The fences were not so good and strong as they should have been. The Indians have a bad fashion of making the panels too long, in some cases these are fourteen or fifteen feet. For a strong fence in this windy country ten or at most eleven feet pannels should not be exceeded, with strong pickets or posts. This is a splendid reserve and crops seldom or never fail. The turnips did not look so well, although there would be a fair crop. Onions and carrots in same garden were good, in others overrun with weeds. These Indians will persist in sowing their turnips broadcast, although they have been told over and over that it is wrong to do so. The stables are about the same as before; a few new ones have been put up, but more would be needful to furnish room for the increasing herd. Stanchions were found in some.

Joseph Badger, sr., has a good house and field of six acres of oats near the house, poor, owing to the weeds. It was said the seed was bad. Two acres of wheat also weedy, and on the bench or high land five acres of wheat, good. Potatoes were good and turnips fair, but both had too many weeds. The house had a painted roof. Mr. Badger has a nice little workshop, tools all nicely arranged on walls; makes chairs, rocking chairs, bedsteads, tables, snowshoes, jumpers. He is more of a mechanic than a farmer, and there is also some excuse for his crop being so dirty from the fact that his wife is an invalid. I found her in precisely the same position she was in a year ago, not able to walk, and of course Mr. Badger has to attend her constantly. Mr. Badger is a tasty man, however, as he has some poplar trees planted around his house. A good deal of new breaking had been done, also summer-fallowing.

Francis Drever has a very neat house and good stables. Has two fields, twelve acres of wheat and six of oats, both good, the wheat is the best on the reserve. New fencing, well made, ten acres summer-fallowing, root crops also very good and free from weeds. This is a sample of the majority.

Peter Badger has a new house and good stables, six acres of oats, fair, and twelve acres of wheat, very good, also potatoes.

Edward Smith: good house, shingle roof, good stables, two ploughs were going hard and the chief himself was working one of them. The little church is near here, a neat building; and inside was nicely arranged. The graveyard is alongside and is neatly fenced and was in good order. The church has a small tower and a bell. It is a Church of England mission.

The usual inventory was taken. The cattle were rounded up during the inspection and all the calves branded and transfers made. This took up an entire day, but the work was thorough. The herd was in splendid shape, in fact a finer lot of cattle could not be seen any where. The total number was 179 as against 140 the previous year; this was of course after deducting those killed for beef during the year. This reserve is in good shape, but there is a tendency on the part of the Indians to rest satisfied with what had been done when with more push and energy on the part of themselves a great deal more could be done. The school was visited and it was found in good repair. It was clean, bright and cheerful, and Miss Wilson, the teacher, was doing efficient work, as could be noticed from the brightness and intelligence of her pupils. We next proceeded to

Fort à La Corne.

Mr. J. H. Gordon is farmer in charge of the two bands, James Smith's, No. 100, and Peter Chapman's, No. 100*a*, the latter including Big Head's following.

James Smith's Reserve

was first visited. Considerable improvement was noticed over the previous year, but there was room for more. The houses had not been whitewashed for two years, but a kiln of lime was to be burnt and all houses whitewashed outside and in, in the fall. There was plenty of limestone on the banks of the river (South Saskatchewan). The crop put in was 32 acres wheat, oats, barley and roots, being 11½ acres less than last year. The crops were looking well, the roots being particularly good. The chief's field was the poorest in the lot. He has a good house and stables and his place was clean all around. His garden was also free of weeds. A new church was built since my last visit; it is situated on rising ground not very far from the mission buildings. The building is log on stone foundation, 20 x 26, with chancel 12 x 14, shingled roof; will accommodate 150 persons. The view from the church is a fine one, looking up and down the river with its sloping banks. The building is Gothic style and would be ready for use in September. It has been built entirely by private subscription, the Indians contributing a liberal share. There is a neatly arranged and kept cemetery near the new church. It is 120 x 140, good fence with round poles peeled of the bark, standing on end, and top rails painted black and post tops painted white. Two very pretty gates are at each end, and the inside is nicely laid out in plots, the whole place reflecting credit on the good taste of the Indians. The school building is a good one, but the day school had been closed and was expected to be soon opened again, as there were children enough in the locality to warrant a school here. Rev. Mr. Wright was the missionary and it is a Church of England mission. The services are well attended in the school house on Sundays, and the Indians were looking forward with interest for the opening of their new church. The cattle were rounded up and calves branded and any changes recorded in cattle records. The herd numbers 95 head as against 84 a year ago. The 95 head are held by 16 families. They were in the best of condition. Some thoroughbred bulls had been received. In private stock the band has 11 horses, 3 bulls and 9 young cattle.

Peter Chapman's Reserve

was next reached. The crop put in here was 11 acres, being 4 more than last year; and "Big Head," 18 acres, being 4¾ more than last year. The crops looked very well. Wheat was particularly good, and gardens, on the whole, clean and

well cared for. The potatoes were too thickly planted in some places, but still there would be a good crop. The turnips were sown broadcast, but were a good crop, also onions and carrots.

The houses and stables were all visited and found to be in good shape. The Indians were living chiefly in lodges.

The cattle of Peter Chapman's Band and "Big Head's" were rounded up in their different corrals, and all calves branded and transfers put on record. The cattle at both places were in the best of condition. The two herds numbered 125 head, held by 15 families. The number last year was 99. In private stock the two bands have 11 horses, 3 cows and 6 young cattle.

An inventory of the property in the hands of the farmer was taken. Mr. Gordon is a reliable man and keeps everything very correctly and neatly, and the Indians are likely to get along well under him. There were some stacks of hay left over from last year. This is a splendid hay district, and cattle-raising is a sure industry if properly attended to. The introduction of new thoroughbred bulls would be of much benefit in improving the herd, for there is no more trouble in attending a good animal than there is of a common scrub, and the difference in value at the end of three years is nearly double.

The Indians felt encouraged at the prospects of having a good yield in the way of crops and felt proud at the increase in their cattle. The old man, "Big Head," was proud and thanked me warmly for taking him out an old condemned shot-gun. I took it all the way from Regina, and presented it to him myself. He is gentlemanly in all his actions, and carries out the agent's wishes at all times. He is one of the finest Indians I have met with, and I would like to see him presented with a new gun. We now proceeded to the agency,

Duck Lake,

driving over one hundred miles. R. S. McKenzie, agent; W. Sibbald, clerk; Sandy Thomas, teamster and interpreter. A new fence had been placed around the whole of the agency buildings and garden. Eight acres of new land had been broken for a home field, so as to summer-fallow the old and to exterminate the weeds. Good gates have been placed at each entrance to the premises. Lumber was on the ground for a new cattle stable. The whole place was, as it always is, in excellent shape. The clerk's house had been painted inside and some of the rooms papered. Partitions have been put in upstairs, and a porch on the front door. Mrs. Sibbald did all the painting and papering herself, and made a splendid job of it.

One Arrow's Reserve, No. 95,

was now visited. In going to this reserve we had to pass the historic battlefield of Batoche. Mr. Louis Marion is farmer in charge. The farmhouse had been willowed and plastered outside, and plastered inside, and other repairs, making it a comfortable dwelling. The farmer was putting up a small building for a granary. Two new houses had been built by the Indians and two new stables. Thirty-five acres of new breaking, and 17 acres were being summer-fallowed. The crop put in was: wheat, 95 acres; barley, 22; potatoes, 5; turnips, 2; carrots and onions, $1\frac{1}{8}$; total, $115\frac{1}{8}$, being $12\frac{1}{4}$ acres more than last year. The grain would be a poor average crop, the extremely dry weather having told on it. Potatoes and turnips were looking very well. Some of the wheat had been cut, and I noticed in one field one man cutting with a cradle, and two women using sickles, others were gleaning and binding. "Painted Nose" had a nice field of 8 acres of wheat, fair crop; straw short, but heads good. This man had wheat enough last year to keep him in flour the whole year; was breaking more land and back-setting. Francis Dumont had 5 acres of wheat, poor, would probably get his seed; good potatoes and turnips was busy haying; has a new field of 20 acres broken in a new location, and is building a new house and stables. The location is close to a lake.

"The Rump" had about 14 acres of wheat; half of it was fair, and half poor. Potatoes were good, and turnips fair. This was about the general run of the others. The houses were all closed up, but they had been left in a clean state. I did not notice much improvement as regards cleanliness of the children.

The cattle were looking very well. The herd numbers 84, as against 70 the previous year. The Indians had no complaints, and seemed to be working better than I ever found them. The progress might be better, but the dry season discourages them. The school on this reserve was closed, and the children were expected to be sent to the boarding school at Duck Lake as soon as there was room for them. In private stock, this band had 44 horses, one steer, 10 cows, 2 heifers, and 8 calves. The houses and stables are of a good class. The Indians earned money gathering seneca root. The fences were particularly good, and where these were crooked and irregular they were taken down and put up straight, giving a much neater appearance to the fields. An inventory was taken of property in the hands of farmer, and his books examined. Mr. Marion keeps his place in good shape, and is doing his best to advance his Indians. The herd should increase more rapidly; the pasturage is good, water is plentiful, and the industry is a profitable one. Gardens have been well attended to, and weeds kept down.

The next reserve reached was

Beardy's, No. 97,

or Farm 8*b*, L. Lovell being farmer in charge, and also of Okemasis, No. 96. The farm house had been put in order—sheeted with dressed lumber upstairs, and outside walls willowed and plastered. The roof of the stable had been raised. There is a workshop, where many repairs are made. Ploughs and other implements are brought from other reserves for repairs and painting. The crop put in here was:—

	Beardy's.	Okemasis'.
Wheat	162	35 acres.
Oats	28	5 "
Barley	33	6 "
Potatoes	7	3 "
Turnips	10	4 "
Carrots	1	½ "
	241	53½

being 17½ acres more on Beardy's than the previous year, and 7 acres less on Okemasis'. The crops, on the whole, were disappointing. The fields were neat and well laid out, and grain put in properly, as far as sowing broadcast can be said to be proper. The crops looked excessively well up to the end of June, when the long, dry, hot weather told on them. Some of the fields would not be worth cutting; others would give the seed, and others would be about half a crop.

The gardens were good, and had been well attended to. Potatoes look very well. The cattle were in fine shape. Beardy's herd numbered 153, as against 144 last year, and Okemasis' 53, as against 43. In private stock Beardy's Band had twenty horses, one cow, one steer, three heifer calves. The herd is in the hands of twenty-one families. Okemasis' herd is in the hands of six families. The cattle were all properly branded and entered in cattle record books, each Indian having a separate account.

The Indians were living in lodges, a good many near the hay fields, but the houses had been left in a cleanly state. They are of a good class. They have painted doors. Some are whitewashed with lime and some with white clay. A new house, with shingled roof, had been put up during the year. The stables and corrals were also of a good class, and great care is taken to have them comfortably fixed up in winter.

The hay fields were visited. There would be more difficulty than usual in getting the quantity required. Mr. Lovell was busy loading and stacking along with the Indians. The hay was choice and was cut at the proper time. The haying and harvesting would keep all hands busy for some time. Mr. Lovell is one of our best farmers, being hard-working and practical, and if the crops were not a success it was owing to no neglect on his part. The Indians too are good workers. Usual inventory taken and all found correct.

The new boarding school was visited, it was nearing completion. The main building is 20 x 40 and wing 19 x 27. Boys' dormitory 19 x 19. The building is one and a half story with mansard roof. There are three bed-rooms, two 9 x 10 and 9 x 11 and halls. Girls' dormitory is also 19 x19. These are all upstairs. On the ground floor there are the boys' and girls' day-room, each 20 x 19, and each room has four windows. The dining-room is 18½ x 14, kitchen 12 x 11½, the ceiling down stairs is 10 feet, upstairs 9 feet, pantry off kitchen 6 x 10. The building is frame, lathed and tarpapered and sheeted with dressed lumber on the outside and lath and plastered inside, rooms wainscotted. The cellar is 15 x 15, seven feet high with ceiling, flooring of two inch plank, double floor downstairs and tar-paper between single floors upstairs. The building is to be heated with stoves. Care has been taken for good ventilation. There will be room for 20 boarders, or 25 if the staff got accommodation outside. There were nineteen pupils present and they occupied the basement of the church until the new building was ready. They arrived on 10th August—seven boys and twelve girls from Muskeg Lake, Mistowasis and Sandy Lake Reserves, Prince Albert and from Duck Lake. The staff consisted of Rev. Father Paquette, principal; Mr. and Mrs. Venn, teachers of boys and girls; Mrs. Marcellain, cook; Mrs. Venn will also act as matron. There is a carpenter also. The locality is pretty and on the shores of the lake and surrounded by pretty bluffs, and from the energy and well known good taste of Rev. Father Paquette in gardening and beautifying such places, it can be safely said that in a short time a wonderful change will be noticed here whilst the work proper of the school will in no wise be allowed to lag.

The warehouse was in its usual good shape. The bacon from Lawry & Sons was choice, also the flour from Joyner & Elkington, Fort Qu'Appelle. The office work continues to be well done by Mr. Sibbald, who is correct and methodical in his work. One Arrow's Band had flour of their own for four months, Beardy and Okemasis for seven months, and John Smith's meat and flour for two months. The births and deaths are as follows for one year:—

	Births.	Deaths.	Population.
95 One Arrow's	2	5	104
96 Okemasis'	3	1	20
97 Beardy's	6	8	134
99 John Smith	4	10	142
100 Jas. Smith	6	4	122
100a Cumberland	3	5	91
Totals	24	33	613

The agent continues to give his undivided time and attention to his duties as agent, and the consequence is nothing is left undone. The interests of the Indians are carefully guarded, and at the same time the interests of the department are fully protected, as the greatest economy is exercised, the best proof of this being that Duck Lake Agency is the third cheapest conducted agency in the Territories, as I shall show before concluding this report. Detailed report, with statements and returns, were sent to Regina. I again returned to Prince Albert to make arrangements to proceed to the

Pas Agency, Cumberland District.

The steamer had made her usual trip, and would not make another, and I had, therefore, to get a small boat built, which occupied two days. The boat was 18 feet long, 3½ feet wide in the bottom, and proved a good steady craft. I engaged two competent boatmen, one being a good interpreter. I sent the men on with the boat and provisions to Lacorne, some 50 or 60 miles down the river, and I drove out the following day and, after spending Sunday here, we at once started down the Saskatchewan, arriving at Cumberland House on 30th August, having made the trip in a little over three days, which I was told was good sailing. The agent of the Pas is Mr. Joseph Reader, and he lives some 90 miles from Cumberland Reserve. I had, therefore, to inspect Cumberland without the agent; but he accompanied me on my second visit on my return.

This reserve, No. 20, has an area of 7,936 acres, population 139, of which 134 belong to the Church of England and five are Roman Catholics. There is a church, and Rev. Mr. Cook is missionary, and services are well attended. I was present one Sunday and the Indians were orderly and joined heartily in the services. There was a good attendance of children at school, which was held in the church, the new school building not being completed. I visited every house, garden, field and stable on the reserve, after having inquired in some special matters I was requested to do. I found the houses on the whole fairly comfortable and cleanly kept. Most of the Indians were living in teepees, and most of these were dirty. The teepees are made of bark and old rags, and are generally close to the houses. They cannot be removed like those made of duck, and consequently get dirty, with hay to lie on. I told them they should make reed mats, and floor their teepees with them, and they could be taken out and shaken every morning. The mats would be useful and warm for their houses in the winter. There are reeds here to make millions of mats, and I suggested also to the agent to get the Indians started to make them. Chief Crane has an old house which is fairly clean, and he had built a new house near the old one, 20 x 20, good floor, and had no open chimney, but was likely to put one in. On a second visit the chief was living in the new house, in which there was a good cook stove and the place was comfortable. Had a small field of potatoes, but cattle had broken in and eaten the tops off, so the crop was poor and potatoes small. House had raised beds, and bedding appeared plentiful, but not so clean as it should be. Tables and chairs also were seen. Has a pit-saw frame and some tools, and a number of logs were on hand to be sawn into boards. James Stewart had a low-roofed house, which was one of the dirtiest and most offensive places I ever was in. The floor was made of pieces of bark, and there was rotten fish and filth of all kinds. The chief's brother was also living in this place, a good looking young man, and I told him he ought to be ashamed of himself to be living in such a place. I also sent for the chief, and asked him if he was going to allow such a hot-bed of disease to be near his new house? On my second visit I went specially to see this place, and I found it not only cleaned up, but three-fourths of the floor had been covered with boards, sawn by themselves.

Peter Flett had probably the neatest and cleanest house and premises on the reserve, and I complimented his wife on her good housekeeping. They had beds, tables, chairs, etc. Had a good stable and a calf stable, and a small corral and hay stacked for the winter; had two cows and two calves. On account of one of my men, engaged in Prince Albert, having burst a blood vessel getting our boat off a sand-bar, I had to send him home, and I engaged Peter Flett, who proved to be a splendid boatman, and a careful, reliable man.

Albert Flett had a good house also; open chimney, tables, beds; clean and comfortable. Had a good stable, plenty hay put up. Has four private cows and three calves. Pit-saw frame; a thrifty looking place. These are samples of the houses. The crop put in was 279 lbs. of potatoes, 10 lbs. of corn, 2 lbs. of turnips, 1 lb. of carrots. An estimate had been made of the crop, but it was out of proportion to what appearances indicated. One man was pulling his turnips a month or so too soon, and they were the size of radishes. It was estimated that seven acres were

under crop. With some exceptions the gardens had been poorly attended to and badly fenced. Some planted their potatoes only two inches deep, and others so thick that they looked like rows of pease. The land is stony where it is cleared of stumps; the best of the land is covered with timber. Potatoes and vegetables can be grown very well, but to attempt to grow crops of grain would be a waste of time and money. To get anything like a good field a lot of clearing up in cutting timber and removing stumps would have to be done. The church was a fair building and it was being plastered and whitewashed for the winter, the school taking its vacation meantime. There was a neat little graveyard near the church and a good fence around it. The bulk of the hay was stacked in a swamp three or four miles off and the little stacks were fenced. The band has 18 head of cattle. Those I saw were in good order. The stables were on the whole fair. The Hudson Bay Company had shut down on the credit business and the Indians were feeling this badly; although it is hard on them at present, in the long run it will be for their good. As to the best means of support, hunting is undoubtedly the most natural as well as the most profitable for these Indians to follow. Potatoes and turnips can be raised without any trouble, and thus, with the fish and what they can earn from the hunt, no able-bodied man need be badly off. Work is not to be had here, unless a little boating in summer time, but this seldom appears. Some of the band are very good hunters and make a good living; but there are some lazy ones who live on their more active friends, this does not apply to any extent however on this reserve. The plan I advised was that all able-bodied men hunt all winter, leaving one or two to attend to the cattle, then all to return not later than 15th May and put in the crop; and four times the quantities of potatoes and turnips should be planted and sown, they could then repair their fences, grub more land, get hay put up, put their houses in order, &c. With plenty of potatoes and turnips and lots of fish, with what game they could get, they need not be dependent on either the government or the Hudson Bay Company. The band is reported to have sold furs to the amount of $2,600 trade value, $500 in cash value. The difference between trade and cash value is 25 per cent. Moose were plentiful. About forty persons of this band required assistance more or less, being widows, blind, lame and wholly destitute old people.

The contract price of flour here is $8.28 per sack, bacon 27½ cents a pound, tea 39¼ cents a pound.

I found the Indians civil and pleasant. Bibles, hymn books and church almanacs could be seen in many of the houses, and the Indians seemed to be a quiet, good living people.

I was indebted to Mr. McCrum of the Hudson Bay Company for accompanying me in going over the reserve and also to Mr. McDougall, Hudson Bay Company, for many acts of courtesy, for which I wish to record my thanks. Some children from this reserve attend St. Paul's Industrial School near Winnipeg. Some bales of clothing and blankets had arrived from Prince Albert, which would be of great use to the destitute here.

Before proceeding to the next reserve, it may be interesting to note the site selected for a new school, and the end partially built to be used as a teacher's house, is the old site of the first Hudson Bay Company's post on the Saskatchewan, established by Samuel Hearne in 1774.

The present Cumberland House stands on the old site of the North-west Trading Company, and has been visited by several notables, amongst who are Sir John Franklin and Admiral Back and Sir John Richardson and others of the celebrated arctic explorers.

Sir John Franklin and Back passed part of the winter of 1826 at this post, previous to their journey north to join the exploring expedition of that year. They then explored the coast north-west towards Point Barrow.

A sun-dial, a gift of Sir John Franklin, is now in use at Cumberland House.

The goods received for the destitute for 1893-94 were: 165 lbs. of bacon, 800 lbs. of flour and 10 lbs. of tea; and for 1894-95: 144 lbs. of bacon, 700 lbs. of flour and 9 lbs. of tea. The latter were stored in a small store-house near the church, and

would be distributed by the teacher, Mr. Settee, on orders from the agent, who live 110 miles down the river.

I found in addition to the above goods, received on contract, the following purchases were made in 1893-4: 119 lbs. of bacon, 968 lbs. of flour and 224 lbs. of dried meat. They also received on contract: 55 lbs. of twine, 100 fish-hooks, 5 trolling-lines, 11 lbs. of powder, 33 lbs. of shot, 600 gun-caps and 6 grass-scythes.

I then proceeded down the river ninety miles to the

Pas Reserve

and on arrival there I dispatched an Indian to ask the agent, Mr. Reader, who resides fifteen miles from the Pas, to meet me so as to visit the reserve. Mr. Reader arrived that evening, and in the meantime I inspected the day school at the Pas, on the south side of the river. There is a large church, capable of holding three hundred people. It was built in 1854, and is getting somewhat out of repair. The pulpit, reading desks and pews are adorned by some nice carving done by members of Sir John Franklin's expedition party, who spent one winter there. The rectory is a frame building, painted terra-cotta.

The Pas Reserve is composed of Nos. 21, 21A. and 24. Population, 392 (Church of England, 362; Roman Catholics, 5; Brethren, 25; total, 392).

The crop put in in the year 1894, was :—

Potatoes	11,820 lbs.
Barley	788 "
Corn	35 "
Turnips	5 "
Carrots	5 "

The estimated yield was: potatoes, 3,000 bushels; barley, 50; corn, 5; turnips, 50; carrots, 30; 20 acres were supposed to be under crop, but I was under the impression this was too high an estimate and suggested that the gardens should, in future, be measured with tape line instead of estimating. The estimate of the yield also, I considered, was too high. The crop of roots had not then been all harvested; some were still in the ground and some in pits, but no record had been taken. The barley had not been threshed, but I could not see where 50 bushels would come from, and I saw all that was grown. There are about 60 houses and 40 stables, all of which I visited, accompanied by the agent. The cattle were in good order. I saw a good many of them, but not all, as they have no corrals and cattle were in the woods. I recommended a corral on each side of the river; half of the band lived on one side and half on the other. The herd is as under :—

	Department Control.	Private.	Total.
Bulls	3	1	4
Oxen	10	8	18
Cows	17	18	35
Steers	2	6	8
Heifers	...	7	7
Bull calves	5	4	9
Heifer calves	8	10	18
Totals	45	54	99

The supplies for the destitute for 1894-5 were: bacon, 381 lbs.; flour, 1,900 lbs.; tea, 24 lbs.; twine, 175 lbs.; fish hooks, 400; trolling lines, 20; and in implements, 20 scythes. A similar supply of provisions had been received the previous year on contract, and in addition the following appear to have been issued. As no books are kept in the way we have in Treaties 4, 6 and 7, showing receipts and

issues, but only copies of triplicate receipts, it was difficult to get at exact figures; but the following I found, from receipts and copies of statements in letter books, had been issued during the months of February, March, April, May and June, 1894, over and above contract supplies: tea, $27\frac{5}{16}$ lbs.; bacon, $317\frac{1}{4}$ lbs.; flour, $1713\frac{1}{4}$ lbs.; dried meat, $752\frac{3}{4}$ lbs.. The contract prices for goods at this point are: bacon, $27\frac{1}{2}$ cents; flour, $8.25; tea, $39\frac{1}{4}$; biscuits, $13\frac{1}{5}$; soap, 18 cents; and at Big Eddy, the other side of the river: biscuits, 16 cents; soap, 19 cents.

Logs were on the ground for a new school house at Big Eddy; but, to my mind, the school building was good for some years, with some repairs to the roof, and the logs could be used in erecting agency buildings, namely,—house for agent, office and store-house and a stable. All goods could then be stored here, instead of being scattered at different points, as at present.

There are good schools on this reserve and the attendance particularly good. The pupils were bright and intelligent and seemed much interested in their studies. Some of the older boys were anxious to learn trades, and I was under the impression, if an industrial department were conducted at Emmanuel College, Prince Albert, it would meet the wants of places like this.

Fish are in abundance here, and ducks also, and hunting is very good for six months in the year. It is a good hay reserve, and potatoes, turnips and vegetables are always a sure crop when properly put in and looked after. Barley, oats and wheat can be grown, but to have anything like a decent field a good deal of clearing of stumps and trees would have to be done. There is plenty of timber, both for building purposes and for fuel, on the reserve, and any quantity comes floating down the river. Limestone is also easily to be had. The houses needed whitewashing, and the Indians promised to have some lime burnt and have all their houses whitewashed in the fall. Some of the men here are inclined to be lazy and to hang around the Hudson Bay Comany's post, instead of working. Many of them make a good living hunting, and a few get work boating, but there is not much of this to be done. They sold fur last year to the amount of $3,000, and the value of fish caught and consumed, and some sold, is estimated at $2,700. The Hudson Bay Company having stopped giving credit, these Indians are now thrown on their own resources.

They are a nice lot of Indians, are intelligent, and no able-bodied man or woman need be badly off. The hunt is of course the main source of earning a living here. Fishing will always give food, and with plenty of potatoes and turnips they can get along very nicely; but, if grain-growing is to be relied upon for a living, the department will surely have to supplement to a large extent or the Indians will starve. In the meantime they can go on clearing up more land for larger fields. I found the houses very fair and cleanly kept. To describe all would take too much space. The Indians made oil, and sold 100 gallons of it to the Hudson Bay Company. They dry fish, and use this fish and oil as food in the winter. The hunting consists largely of muskrats, as many as 40,000 were sold to the Hudson Bay Company in one year; but last season only 8,000 were secured; it was expected the present year would be a favourable one. Other game consists of moose, caribou, rabbits, duck, prairie chickens, mink, bear, beaver, foxes, &c. The school building on the south side is an old one, and has to be propped up on one side and one end, and is not worth repairing; it needed plastering and whitewashing for the winter. I understood logs were being got out for a new building next year. Chief Antoine Constant, who lives on the south side, has a good house, with two divisions and partitions, well furnished; has a good garden, potatoes, corn, vegetable marrows; has a carpenter's bench, and does a lot of work in this line. Tool chest complete, except some augers; has a fanning-mill and crusher, all under cover; has had tool chest for nine years; has a flagstaff but no flag—I heard some flags were coming.

Charles Constant: neat house, shingled roof, house had just been mudded, good stable, place not very clean around. The gardens on the whole did not show that much care had been taken of them. As far as their advancement goes in the way of being civilized and educated at the schools, &c., they will compare favourably with any Indians I have met with.

On the Big Eddy, or north side of the river, I found a better class of houses, and more care taken of the gardens.

James Atkinson: Good house and stable, comfortably furnished. Too old to hunt, and is destitute. Another house, with three widows also destitute.

Thos. Henderson was in bad health and requires help; has neat little house, bedstead, new blanket and quilt, and his house is clean; picket fence around house, and had small patch of potatoes; barley eaten up.

John Cook: Nice tidy house, three bedsteads, tables, chairs, clock, floor clean, burnt lime to whitewash his house, picket fence, makes pretty bark baskets, asked for hinges for his doors. Had some barley and it was piled on top of the shed, corn was hung up to dry. Had built a small house for his son. Garden fair, potatoes, turnips, vegetable marrows, two stacks of hay, good stable and good cellar, a thrifty old man. In nearly every house I could notice Bibles, hymn books, church almanac, mottoes such as "God Bless our Home," and in one the motto was "Eat, drink and be merry."

John Peter Cook has a neat new house in the woods, well made and plastered, an enterprising young man. Had no work this summer and could not buy nails to finish his house. I had five pounds I brought with me from Prince Albert in case of accident, and I gave these to the young man, and he was the happiest man on the reserve. He had land broken for a garden.

Louis Partridge: New house, not finished, upper floor, board and shingled roof. Although these are all English names, very few of them can or will speak other than Cree. A more pleasant lot of people I never met with and they were delighted that we called to see them in their houses; by this time most of them knew of our visit and they had their houses scrubbed and otherwise looking their best and I could notice from the general appearance of the places that they were in the habit of keeping them in good order regularly.

John Harris: Nice house and comfortably furnished. The women well dressed and clean. Good garden, potatoes, turnips, corn, &c. Has a sister very poor and requires help. Stable too low in the roof.

School building already referred to, teacher had a neat little house and was adding a wing as a kitchen, building it at his own expense.

Mrs. Cameron, widow with two children, very poor and has never received any help, husband died three years ago, two children died last winter. Has been taken back to treaty, but money is kept to pay scrip for herself and her late husband.

David Cook: Good house and outside kitchen, oilcloth on tables, good stables roomy and clean, fair garden, hay corral. Comfortable place.

Baskets and bark milk pans were noticed in many of the houses.

Joe McGillivray: Good house with outside kitchen both shingled, shingles purchased in Prince Albert, good garden, barley cut and stacked in corral.

Thos. Henderson, councillor, has a very good house and it was well furnished, neat and comfortable, new cook stove, pictures, door and window frames painted, a platform in front of door.

Two good stables with stanchions, manure piles at nearly all the stables. I told them to put this on the gardens. Henderson said he had no cart to haul it. I told him he did not need a cart, but to make a sled and the ox could haul it, the distance was short, and for every bushel of potatoes they got now they would get two, besides cleaning up their places.

The land is gravelly and sandy in some places, and requires a lot of manure, and yet these people will camp year after year, and never put a particle of manure on the land, although piles of it are just at hand. I told them that farmers in the east would pay 50 cents a load for such manure. Henderson had two patches of potatoes amongst the stumps. Had a good assortment of implements neatly stored. Amongst them I noticed a fanning-mill and a crusher, almost new, as they had been little used, hay frames; thrifty-looking homestead. This man preached in the church on Sunday in the absence of the missionary.

Henry Thomas: Small house, but locked up. Has a good new house, but not quite completed; upper floor, picket fence around the place, good garden—potatoes and turnips, fair stable, stanchions and compartments; roof too low. A short distance from here is a small house used as a Catholic mission, where services are occasionally held.

Isaac Bignail has been blind for eighteen years. Neat little house; has two boys—one was fishing and one had to stay at home to attend to his father. Has one daughter, and she was doing patchwork. Pictures were on the walls. This family appeared poor. Wife is a good worker; gets a little help in food. Got one blanket, and the old man said he was thankful for this help. Has no cattle, small garden. I told the agent to see that this family was not neglected.

The above are samples of the houses visited, and I did not miss one on either side of the river. About eighty persons are more or less destitute and unable to earn a living, and will require to be assisted. The same remarks apply as to the best mode of these Indians earning a living, as I stated about the Cumberland Band, hunting in winter and growing plenty of potatoes and turnips. The teachers at both schools distribute the food given to the people, the destitute only receiving any. The teachers do this work without any extra pay.

The church is well attended; I counted two hundred in the morning and one hundred and seventy-five in the afternoon. The services were orderly and the singing hearty.

We now proceeded in Mr. Reader's steam yacht to Chemawawin Reserve, or Cedar Lake, as it is called by Hudson's Bay Company. The area of this reserve is 3,061 acres; population, 139 (124 Church of England and 15 heathen). Supplies for the band for 1894-95 were: bacon, 127 lbs.; flour, 600 lbs.; tea, 8 lbs.; twine, 58 lbs.; scythes and snaths, 4; 100 fish-hooks and 5 trolling-lines, and a similar quantity had been received the previous year; and there were purchased besides: 200 lbs. of flour; 25 lbs. of bacon, in February, 1894. Five blankets were also issued. The crop put in in 1894 was: potatoes, 600 lbs.; barley, 100 lbs.; corn, 14 lbs.; turnips and carrots, 2 lbs. The estimated yield was: 70 bushels of potatoes, 15 bushels of barley, 1 of corn, 5 of turnips and 2 of carrots. From appearance I would judge this a fair estimate. The band had 1 bull, 4 cows and 3 heifer calves; total, 8, under departmental control. Cost of supplies delivered at this point: bacon, 27½ cents; biscuits, 13½ cents; flour, $8.25; soap, 18 cents, and tea, 39½ cents.

Principal support is hunting and fishing. This is a good point for sturgeon. A good trade is made from selling gelatine derived from certain parts of the fish.

Good reserve for raising potatoes. Indians not very well off. Children badly in need of clothing. Some bales had just arrived from England to be distributed, which would be of great benefit.

There is a Church of England mission, Rev. Mr. Sinclair being the missionary. Good mission premises, and in capital order. Services are held in the school-house. A new church had been commenced and would be ready in the summer of 1895. It is 30 x 20 and chancel 12 x 8; five windows; porch and vestry; shingled roof. The cemetery is close to the church, but is not fenced in. The school building is an old and uncomfortable one, but logs were on the ground for a new building. I visited all the houses on both sides of the river, and in most cases these were not as clean as they should be, and the children were dirty. On the south side, Jas. Lathlin, councillor, has a good house; open chimney; mud roof; beds on floor; bedding scant and dirty; tool chest nearly empty. Has a cow, heifer and calf; corral with hay-stack. Has a good stable. Has another house on the island. Has a flag-staff, and his flag was up, also flag at mission and at Hudson's Bay post, all in honour of our visit. Lathlin had some potatoes, and was grubbing more land on the north side.

John David McDonald has a good house, three rooms, two beds, tables, etc.; comfortable place. His wife had been sick for ten years and never had a doctor; was absent when doctor visited reserve. I told them they should have found out when the doctor was visiting and been at home. Wife's sister was sewing; planted half a bushel of potatoes and would have a few; worked thirty days at Grand Rapids at $1.50 a day. Was whitewashing his house, using a piece of canvas, as he had no brush. Had a good cook-stove.

Maggie Grange, widow, has two children naked and dirty; subject to fits, poor and helpless.

Wm. Thomas: Small house, door frame painted, clean, new house building. Has a cow and heifer calf. The place was clean all around. Planted twenty single

potatoes being all the seed he could get. Has a little corn, is a good worker. A blind man lives here, also a sick boy and a widow. Two teepees here were dirty, children naked and dirty. Isabella Stewart, widow, thrifty and hard-working, but poor, has a cow and calf and takes good care of them. Had three tons of hay put up. Had a snug little stable. House very clean. This woman baked some bannocks for us and I gave her 50 cents; of course we supplied the flour. I met here Mr. S. Bray, who had completed surveying some more land for the reserve at Poplar Point. Mr. Bray was about leaving for Moose Lake, where we met again.

Total crop here about one acre. Furs sold last year to the value of $742 and fish $300. About 30 of this band are helpless and completely destitute, and will need to be fed. Those who are able-bodied are hard-working and are doing their best to make a living. They are a nice lot of people, but some are very backward as regards cleanliness. The school is well attended. Mr. Lamb was taking a lively interest in the school.

We now proceeded down Moose River to Moose Lake. Area of this reserve is 7,264 acres, population 122, Church of England 101, heathen 21. Crop put in about three acres. Potatoes, 1,200 lbs.; barley, 100 lbs.; corn, 15 lbs.; turnips and carrots, 2 lbs. Estimated yield 250 bushels potatoes, 15 of barley, 1 of corn, 5 of turnips and 2 of carrots. Cattle consist of ox, 1; cows, 7; heifer, 1; bull calves, 4; heifer calf, 1; total, 14. They had a bull, but it died during winter, I could find no particulars as to cause of death. The supplies received for this band were bacon, 121 lbs.; flour, 600; tea, 8; twine, 58; scythes and snaths, 5 and biscuits and soap for school. A similar supply had been received last year, also purchases of 400 lbs. of flour, 50 lbs. of bacon. Five blankets were issued. The Indians had not all moved over from their old reserve, as their crop was in the old place. I met Mr. Bray here and he was coming to survey the new reserve.

I visited all the houses, chiefly new ones, and more were being built. The chief was living in a house belonging to the Hudson Bay Company until his own was completed. He will have 70 bushels of potatoes. He says they feel the hardships of the new fishing regulations. The agent assisted them by giving them ammunition. All the fur they got went to buy food. Had to pay $10 for a bag of flour in trade, and $6 if paid in cash. They had to give five rat skins for a cup full of tea. He admitted they had killed a government cow last winter, as they were starving. About twenty of this band are helpless and will require assistance. Value of fish consumed last year was estimated at $1,000, and furs sold, cash value $767. Hunting and fishing are the main sources of making a living, and raising potatoes. Able-bodied men and women can get along very well, but the old, cripples, blind, and widows with young children can do little for themselves. The proportion of such helpless and unfortunate creatures is large in this agency.

Pas Mountain.

The population is 171. There are two schools at this place, but only one recognized by the department. The other one was carried on for some time by a Mr. Dunlop, who gave biscuits and carried on the work at his own expense. Mr. Dunlop had left and Rev. Mr. Hines sent a teacher in his place, but I was told this teacher was going to Moose Lake, as the teacher there was going back to college. The contract prices for goods at Pas Mountain were: bacon, 35cts. per pound; biscuits, 20¾cts. per pound; flour, $14.70 per sack; tea, 47½cts. per pound. About forty-five of this band will require help, more or less. The Red Earth portion of this band are enterprising and are getting along well, and take good care of their gardens and cattle. The Shoal Lake portion are more backward. Hunting and fishing are the main sources of making a living here also. Their earnings last year for fur in trade value $2,830, and other industries amounted to $900, and value of fish consumed, $200.

Grand Rapids.

The area of this reserve is 2,752 acres; population, 110—Church of England, 109; Roman Catholic, 1. Three acres under crop: 1,260 lbs. potatoes, 10 lbs. corn, 2 lbs. turnips and carrots; estimated yield, 150 bushels of potatoes, 1 of corn, 5 of turnips and 2 of carrots. Supplies for destitute: 106 lbs. bacon, 300 lbs. flour, 6 lbs. tea, 60 lbs. twine, 100 fish hooks, 5 trolling lines and 3 scythes and snaths. Cost of contract goods, 1893-4, was: bacon, 11½cts.; biscuits, 6¾cts.; flour, $3.50; soap, 11¼cts.; tea, 30¼cts.

These Indians earn a good deal working for the fishing companies. Hunting, also, is followed to some extent. Six old and helpless of this band require assistance in food and clothing. The band has in cattle eleven head, department control, and one, private; total, 12.

The school building became in such bad order that it was condemned. The average attendance of pupils has been twenty. The teaching will be carried on in the church until a new building is erected, logs for which are on the grounds.

The total number of cattle in the agency is: department control, 113; private, 123; total, 236; and 13 horses, 4 at the Pas and 9 at Pas Mountain.

The total population is 1,073, and the births and deaths for twelve months were as follows:—

	Births.	Deaths.	Population.
Grand Rapids	7	3	110
Chemawawin	4	...	139
Moose Lake	2	2	122
The Pas	16	12	392
Pas Mountain	8	6	171
Cumberland	7	5	139
Totals	44	28	1,073

At the time of inspection the health of the Indians was very good.

Total destitute:—

Grand Rapids	6
Chemawawin	30
Moose Lake	21
The Pas	88
Pas Mountain	46
Cumberland	41
	232

names of whom were furnished the commissioner.

The distances to travel are as under, taking the Pas as a centre:—

			Miles.
From Pas	to	Cumberland	80
"	"	Grand Rapids	130
"	"	Chemawawin	80
"	"	Moose Lake	70
"	"	Shoal Lake, Pas Mountain	80
"	"	Red Earth, do	100
"	"	agent's house	15

Prices of goods have been high in this district, but competition was setting in, and these would soon right themselves. The cattle passed through last winter very well, and the Indians are now taking more care of them and stacking enough of hay, so that there is every reason to believe that such losses as occurred in 1892-3 will not again take place. There was room for improvement in some of the stables, and I cautioned them on this point.

After I had been over the reserves I returned to the Pas. The chief, his councillor and about seventy-five of the band met in the council house, a nice building, shingled roof; floor had been newly scrubbed. There were tables, benches and chairs. The chief said he wished to have a friendly talk about the reserve. He was glad for the help which they had received, thankful for the implements and tools. He said last winter was a hard one, and expected it would be the same this coming winter. January, February and March are the hardest months, as the fish take to deep water and they cannot get at them. The Hudson Bay Company refusing further advances, would make it still harder on them. They miss the ammunition in order to get ducks to salt down. He said that twenty-five of his young men were anxious to begin gardens of their own, and would require some implements; asked for a mower and rake. The herd on this reserve is now 99 head, and this means 300 tons of hay to be put up; and in order that there may be no excuse for a shortage, I think they should have a mower and rake. He said he liked to visit his Indians, and would like a horse and buckboard. His visits were to see about how gardens and cattle were attended to. Would like some one to instruct them in farming; and that their children be allowed to go to school after they are fifteen years of age. He said they were to do a lot of grubbing, and were going to burn lime to whitewash all the houses. He was not extravagant in his asking.

James Cook, councillor, endorsed what the chief had said, and was thankful to the department for the aid given to the old and feeble.

Thomas Henderson, councillor, also endorsed what the chief had said, and added that dogs were getting too numerous and were annoying the cattle, and sometimes killed the calves, and would like if they had horses instead. I asked how they would feed horses in making long distances. Dogs would eat fish, but horses would not. The hay would have to be taken along each trip or stacks made at many points. He said some of the people were poor, and were short of clothing, and suffered in consequence during the cold weather.

Henry Thomas endorsed all that had been said. They were all willing to work and to do what was right, but they must know how to improve their positions, and had no one to tell them or show them. I told them they were behind in their gardens, and that it was not encouraging to send seed potatoes, as had been done, at a big expense, to have them eaten up by cattle, as I had noticed in some places; that they should raise in any case more than they do, but they must use the manure, and plant them properly and hoe and weed them well, and make good fences; they had plenty of timber at their doors, and it was just as easy to make a straight fence as a crooked one. I complimented them on having the schools so well attended, and in seeing so many of them also attending church.

No one else had anything to say except Henry Cook, jr., who left the treaty some time ago; has lost one of his legs and walks on stilts; has a wife and family, and a daughter very sick, is utterly destitute, and wants to get back into treaty. I told him to send in his application in usual form and agent would forward it; not being in treaty, agent can do nothing further, and the man is helpless. What is to be done in such cases? I asked Mr. McKay, of the Hudson Bay Company, to see that this family did not suffer during the winter. These are a pleasant lot of Indians, and, so far as I could judge, a good-living lot of people.

The system of keeping accounts here is an antiquated one.

I gave the commissioner some figures and particulars regarding the purchasing and freighting of supplies for this agency. Mr. Reader is faithful and conscientious in all he does, but single-handed, it is impossible for him to oversee so many places with such long distances between them, and do the office work also, and if he were not assisted by his son, who is a clever and intelligent young gentleman, I do not see

how the work would be done at all. Mr. Reader, jr., does now all the office work and has a good idea of what is to be done on the reserves and is, therefore, of great help to the agent. I may say here that the agent does not spare himself, as he is hard working and he is familiar with all his Indians, which is only natural, having been so long amongst them. The conclusion I arrived at, after having gone over the ground, was that the agency is a good one and the Indians can and should make a good living, if they exert themselves, by hunting and fishing, while the cattle will be a source of profit to them later on. I do not think depending on grain would be a success; on the contrary, it would bring them to be dependent on the government. Root crops should be raised on a larger scale than at present and more supervision is required to have these Indians advancing as they should, considering the many natural advantages they have within themselves.

I returned to Prince Albert and it took us 7½ days to come up the river.

Emmanuel College

was my next point, having inspected it on 29th September, 1894.

Ven. Archdeacon Mackay, D.D., ...principal.
Mr. Gale .....asst.-principal.
Miss Childs.....matron.

A new room has been added since I was here last; it is a dormitory for the girls. Ten new iron bedsteads had also been added, the new room is 30 x 24, and ceiling is 8 feet high, one large window and a sky-light, ceiling and walls sheeted with dressed lumber. The other rooms and dormitories had all been kalsomined and the whole place was in splendid shape. The beds are supplied with quilt, sheets, two blankets, wool pillow, palliasse; night shirts were to be provided. The boys did all the kalsomining and did it well. Boys' dormitory, No. 1, has 7 beds; dormitory No. 2 has 3 beds (2 iron, 1 wood); dormitory No. 3 has 6 beds (4 iron, 2 wood).

The stock consists of 4 cows, 4 young cattle, 23 sheep some fine specimens, 3 horses, poultry, geese, turkeys and chickens. Butter is regularly made. Ten acres were under crop, 5 of oats and 5 roots and garden. Four acres of new land broken, making a pretty field of 10 acres. Twenty bushels of onions were in one pit and there would be an abundance of potatoes and vegetables for the use of the house. Boys have little gardens of their own, a pleasing feature, and are allowed to sell the produce. They kept them very well; this is valuable training for these boys. The fields were neat and clean and the boys did all the work. The girls help in the house. Beef is supplied, cut up, at 5c. per lb. There is a scale of rations, but pupils get all they want, there is no stinting in food.

The garden had tomatoes, rhubarb, carrots, pease, cabbage, potatoes. These they had been using since July in the house. Currant and gooseberry bushes, red currants, parsley and other herbs and other vegetables.

The whole place and surroundings were in the best possible order, and should have a good influence on these boys in their after life. The work of the school and list with names of pupils, appears in my last annual school report. The number was 28 (boys 18, girls 10). It was the intention to enlarge the school-rooms. This college has done, and is now doing, splendid work; its graduates are proving themselves to be competent teachers, and they are a credit to the college.

I now returned to Regina, and on 16th October left again for the north and resumed my inspection by commencing at

Moose Woods Reserve,

On 17th October, 1894, W. R. Tucker in charge, and Mrs. Tucker teacher. The new farm stable had been completed since I was here last. The upper part, which was intended to be used as a carpenter shop, was not found suitable for that purpose, but it makes a good hay loft in winter, and it is used as a play-room by the school children in summer.

A new store-house 12 x 15 was about being completed. The crop put in was two bushels of wheat, six bushels of oats, and sixty bushels of potatoes and some turnips and onions. Wheat and oats gave no yield, and only ten bushels of potatoes, owing to unusually dry weather.

Hay put up, 650 loads. Each load is said to be equal to a ton. There were eleven large stacks in four different corrals about four or five miles from the stables. One corral with eighty tons is near the stables. The stacks are well made and fairly well fenced, and double fire-guards were ploughed around them. One hundred tons of hay were left over from last year. The small corrals alongside of Indian stables were filled with hay. These Indians are always particular in having plenty of hay put up.

The cattle were in fine condition. Some of the cows were thin, but as the calves were soon to be weaned, the cows would improve. The calves were a splendid lot. The shorthorn bull is one of the finest in the country. The herd consists of:—

Oxen	16
Bull	1
Cows	53
Steers	18
Heifers	21
Bull calves	21
Heifer calves	25
	155

held by eleven families, as shown by detailed sheet attached to the returns. The number on hand last year was 113. In private stock the band has five cows, five steers, two heifers and four calves, two pigs; and many have poultry. I visited all the houses and stables, and found them in good shape. Not one house could be said was dirty. Some have made additions and lean-to kitchens. Stabling has been much improved and some good additions made.

Maggie had a nice new stable and calf shed neatly arranged so that cows and calves can be fed from a passage leading from hay corral. Her new house had been completed, and it was a model of neatness. There were iron bedsteads with brass knobs and mountings. Maggie subscribes for a newspaper published in the Sioux language in Santee Agency, Nebraska. I found another Indian subscribed for the same paper. Logs were on the ground in various places for more new houses and stables.

Joe Hanke was building a new stable, 18 x 24; old stable, which is a good one, is 15 x 20, and a third one is 24 x 14. This man has 17 head of cattle, departmental control, and 7 private; total 24. He commenced six years ago with one heifer. He has some good horses, a splendid Berkshire pig, a lot of poultry and fourteen turkeys.

At Mrs. White Cap's, I noticed a lady's riding saddle. Table covers and curtains are to be seen in many of the houses. Nearly all owners of cows make butter more or less. The private earnings of the band have been about $320. Thirty deer were killed last winter, and rabbits, chickens, and ducks were plentiful. The population is: men, 9; women, 16; children, 28. Of these, 15 are of school age, and the rest are young. The quantity of food supplied by department from 1st October, 1893, to 1st October, 1894, was as follows: flour, 8,700 lbs.; bacon and pork, 878; beef, none; oatmeal, 330; beans, 510; a total of 10,418 lbs., or about 8½ ounces per day for each person, young and old, throughout the year, the bulk being used during haying time. Mr. Tucker supplied them with 50 sacks of flour during the year, besides the above departmental flour. They had also plenty of potatoes, and they purchased also, in Saskatoon, a few bags of flour themselves. The want of potatoes would be felt the coming winter, but there were 1,260 lbs. of beans on hand, which would take the place of potatoes to some extent. There has been only one birth on the reserve since last inspection, and no deaths, and no case of sickness. A doctor has not been called to the reserve since Mr. Tucker took charge. The

Indians attend church services regularly on Sundays when they are on the reserve, and are spoken of as being well-behaved, and all heathen practices completely abandoned. They have three government wagons, one private, and 14 carts. Most of the Indians were away bone-gathering. I requested that a large corral be put up. The reserve is in good shape, and Mr. and Mrs. Tucker are doing good work here. The school report will appear in another place. That this reserve has made progress there is abundant evidence. Their houses are of a good class, and their stables are particularly good ones.

Five years ago, my first visit, the herd was some thirty head, and now it is 155 and 16 private, total 171 head. They are an industrious and hard-working lot of Indians and are deserving of every encouragement. I now drove by stage to

Battleford

arriving on the 22nd, and commenced my inspection there on 23rd October.

P. J. Williams, agent.

A. J. McNeill, clerk.

S. F. McAdam, medical attendant.

Wm. Smith, teamster and interpreter.

The agent's house has been undergoing some repairs which would make it more comfortable for the winter. The office, which is altogether too small, had been supplied with storm sashes. The warehouse, which is in the barrack square, was in the same condition as formerly. The first reserve visited was the

Stony, No. 109,

or Farm 11*a*, Mr. S. Warden being the farmer in charge. The farmhouse and outbuildings were in good order. The Indian houses here were being pulled down and the timber sold in Battleford as firewood. The only crop put in was three acres of barley, five of oats and six of potatoes, 78 bushels of potatoes were gathered and the grain was a failure, 520 tons of hay were stacked in the vicinity. The stacks were well made and strongly fenced and double fire-guards ploughed around them. The hay was of a choice quality. The new village is about five miles from the old one in an easterly direction, where there is a good supply of timber all around. Two small lakes and a large one close at hand, besides other smaller lakes in the vicinity, so that there is little chance of water becoming scarce as at the old village. There were eighteen new houses built and these had all been whitewashed outside and in and looking very well, good roofs, and all had wooden floors but one, and this man was waiting to buy boards when he got his treaty money. Some had bedsteads and all would have them if they had lumber to make them. New stables were also put up of a superior class, being roomy and good roofs and doors, some of them had stanchions and slab floors, a better class of houses and stables could not be seen anywhere, and the Indians and Mr. Warden deserved credit for having in so short a time erected so many comfortable houses and stables. A strong well-made corral was at each stable.

There are sixteen children of school age on the reserve. The school building is still at the old place and has been closed for some time. Logs were on the ground for an implement shed. The houses were clean, a marked improvement on the old houses. In addition to the eighteen houses and as many stables, three houses and five stables were burnt by a prairie fire which did a lot of damage last summer in this vicinity, having been burning more or less during the whole summer. It is a wonder the whole village was not destroyed, as the fire seems to have been close to them on all sides.

The cattle were in splendid condition. The herd numbered 148, as against 138 the previous year, 14 head having been killed for beef during the year; detailed list of individual holders was sent with the returns. The band has in private stock 30 horses. The home farm has 3 horses, 2 bulls, 1 cow, 1 steer, 1 bull calf, and 22 very fine sheep. I took an inventory of articles in hands of farmer and chec

books, and found them neatly and correctly kept. The Indians make hay racks, ox yokes, sleighs, fork and axe handles, and they sell wood, hay and lime. They are an industrious lot of Indians.

Red Pheasant's Reserve, No. 108, *or Farm* 11 *B,*

was next reached, Mr. J. H. Price being farmer in charge. The new store-house here had a shingled roof put on and a very good floor laid; windows had still to be put in and plastering to be done. Three new Indian houses and three stables had been built during the year. A new stable for the bulls had been put up next to the horse stable, 20 x 20. The whole farm premises were in capital order; large stacks of hay in corral near the stables. The crop put in, was: wheat, 65 acres; oats, 5½; turnips, 1; carrots and onions, ⅛; total, 71⅝ and 13 gardens. The home farm had 4 acres oats, 4 barley, and 1 of gardens, including potatoes. The crop harvested was: wheat, 30 bushels; potatoes, 42; turnips, 300. Home farm produce, 60 bushels potatoes; barley and oats gave no returns; 1,200 tons of hay were stacked, and fences and fire-guards placed around them. A quantity of hay got burnt by prairie fire. Some of it was in stack, and some in cock at the time. I visited every house and stable on the reserve. The houses had all been mudded and whitewashed outside and in, and clean and comfortable; not an untidy house was noticed, but the greatest improvement was in the stables, many of these had been enlarged and otherwise fixed up, so that the cattle would have every comfort, in roomy and warm stables. Stanchions and slab floors were in many of them. The Indians were taking a livelier interest in their cattle, now that they saw the benefit of having a good herd. Some of the stables had as many as twenty stanchions, and many had separate compartments for the calves. Some have hen-houses, as many of the Indians keep poultry, and it made their places look bright and cheerful to see the lot of hens and chickens. Some good pigs were seen. Butter is made by some, and good use is made of the milk.

The herd is one of the finest in the agency, and numbers 290 head as against 249 last year, and 20 head were killed for beef during the year. There are also under departmental control 10 horses and 27 sheep—a very superior lot of sheep. In private stock the band has 30 horses, 3 cows, 2 steers, 1 heifer, 1 bull calf, 1 heifer calf, 4 sheep and 4 pigs, and a lot of poultry. Names of individual holders of cattle were sent with returns. Home farm had three horses. The Indians purchased with money derived from beef sold to the department, four sets of harness at $13.80 a set, eight double wagons at $65 each, and four mowers with rakes at $95 each (mower and rake), so that notwithstanding failure in grain crops it cannot be said but these Indians are advancing. The Indians sold hay and wood to the value of $500. I took an inventory of all property in the hands of the farmer and checked the books, and, as usual, found Mr. Price very correct in his work. He also opened a new ledger for Mr. Wilson, who was to succeed him in a short time. The Indians were pleasant and made no complaints. The average ration is 8 ounces of flour, 8 of beef or 4 ounces of bacon; larger rations during haying time, and no Indian has wanted during the year. The fire had made terrible havoc around and on the reserve, and one is surprised that a house or stable has been left.

Having for the past three or four years made a specialty of the cattle business, I was more than pleased to notice the increased interest that was being taken by all concerned in this industry, and the greater care in having proper shelter provided as well as hay and water secured. If the crops continue to be more or less failures, the cattle can always be relied upon, so that no Indian who wishes to work need be badly off. The Indians spent their treaty money in buying blankets and flour principally, and scarcely any in useless trinkets. This band was the only one that did not indulge in dancing around Battleford stores for the sake of getting a drink of tea and something to eat, provided by the store-keepers with the view of attracting and securing the Indians' trade. The store-keepers should be above this kind of business and endeavour to secure trade by giving good value, instead of having a lot of Indians dancing and capering around their doors. Mr. Price was about being

removed to John Smith's Reserve, Prince Albert, and Mr. Wilson taking Mr. Pierce's place here.

My next reserve was

Sweet Grass, No. 113, *or Farm* 12*a*,

William Dunbar being farmer in charge. The farmhouse had a stone foundation put in during the year, the cellar was also fixed up by walls on each side and a concrete floor. Some plastering has been done, and the whole house was in good order and was warm and comfortable. The ration-house had been removed on a line with the other buildings and has a stone foundation put in also. An implement shed 18 x 24 and a granary and store-house 18 x 22, thatched roofs, had also been erected during the year. Two new corrals and a slaughter pen had been made and the windlass removed to the end of the pen. A new fence had been put around the garden. The spring had been deepened so that water now flows through a casing of wood into a large trough, where cattle and horses may drink any day in the year. The water is very fine. The buildings were all whitewashed, and in the best possible order, and looked neat and tidy, the whole reflecting credit on the good taste and management of Mr. Dunbar. The implement shed was filled with ploughs, harrows and other implements, and the stables were clean and comfortable. Tools were also neatly arranged in the small shop for making repairs.

The crop put in was: wheat, 79 acres; oats, 6 acres; barley, 5 acres; potatoes, 1½ acres; turnips, 3 acres; carrots and onions, 1½ acres, total 101, being 12½ acres less than last year. The wheat had not been threshed, but it was estimated there would be 400 bushels; oats and barley gave no return; potatoes, besides those consumed, 200 bushels are stored in the farm-house cellar for seed. Turnips, carrots and onions consumed, crop was poor; no new land was broken, 12 acres has been summer-fallowed; no fall ploughing. Three miles of fencing on flat and on bench had been made. Three houses and nine new stables had been built and others enlarged and repaired, corrals were at all the stables; 750 tons of hay were stacked; stacks were well made, good fences and fire-guards around them. The tops of the stacks were fastened with willow branches to keep the wind from blowing the hay away. There were 15 large stacks on the bench and 14 on the river bank or bottom. There were 25 stacks of grain, of more or less dimensions, belonging to as many Indians. The road grader had proved of much benefit and the roads up the hill had been made much easier for the oxen.

I visited every house and stable on the reserve, and found all in excellent order, houses whitewashed outside and in, and they were without exception clean and comfortable; particular pains had been taken to have roomy and comfortable stables. The cattle were all to be wintered on the reserve the coming winter, none sent to Turtle Lake as heretofore. The herd looked very well, all being fat and sleek. The number was 185, as compared with 157 last year, and 25 had been killed for beef and sold.

In private stock, the band has 68 horses and one steer. They had also under departmental control, besides the herd, 33 sheep. Farm stock consisted of four horses and colts, two cows and one bull calf. A number of the Indians have poultry. It was reported that they looked well after their gardens. The farmer had a splendid garden, with a fine crop of cabbage, tomatoes, &c., and carried off many prizes at the show. Mrs. Dunbar made two barrels of soft soap, which were given to the Indians for scrubbing purposes.

The average ration here was 10 ozs. of flour, 8 ozs. of beef, or 4 ozs. of bacon. Mrs. Dunbar also helped the women to make dresses, coats and trousers for the children, from the étoffe, serge, and print sent in. One new wagon and a mower and rake were purchased by the Indians. The houses were fairly well supplied with bedding material, and this would be better after treaty payment, which had not then been made, but would be in a few days.

Some of the older people seemed to be badly off for clothing. The Indians burnt lime for their own use, and sold some, as well as charcoal. An inventory

was taken of all government property in hands of farmer, and books checked, all of which were found satisfactory. The reserve was in capital shape, and the Indians made no complaints. Some of the Indians, seeing the success of Farmer Dunbar's garden, are now using manure, and are asking for other seeds than turnip, carrot and onion, showing that a nice garden round a farm or agency has a good effect on Indians, besides being a source of profit in itself.

Poundmaker's, No. 114, *and Little Pine's, No.* 116, *or Farm* 12 *B and C*

were next reached. F. A. Bourke, farmer, and Peter Taylor, assistant. The farmhouse was in good repair. A new implement shed 18 x 20, log and thatched roof, had been put up, the store-house newly floored, and a new root-house had been made; it is 10 x 10 and 14 feet deep. Two hundred bushels of potatoes were stored in it for seed. Two new houses and five stables had been built on Little Pine's Reserve, and one house and two stables on Poundmaker's and four old ones repaired and enlarged. The blacksmith shop is attended to by Mr. Taylor, and many repairs are made. The buildings were all in good order. The crop put in on Little Pine's was: wheat, 50 acres; oats, 20; barley, 8; potatoes, 9; turnips, 4; gardens, 1¼; total, 92¼, being 20¾ less than the previous year. The grain had not all been threshed, this was being done at the time, but Mr. Bourke did not think he would have more than his seed. One hundred and sixty-five bushels of potatoes and 70 of turnips were secured, but Indians had consumed some during the season. Garden produce also consumed; results were poor. Crop put in on Poundmaker's was: wheat, 40 acres; potatoes, 5; turnips, 3; gardens, 1; total, 49, being 34 acres less than previous year. Grain would give about the seed and there were 85 bushels of potatoes and of turnips. Produce of garden consumed during the season. Dry weather and hail storms accounted for the poor results. The crop appeared to have been well put in. The fields looked neat and fences were good, but a lot of summer-fallowing will have to be done here, as the weeds have made great headway.

	Tons.
Hay stacked on Poundmaker's Reserve	200
" Turtle Lake	400
" Little Pine's Reserve	213
" Turtle Lake	400
Total	1,213

for the two herds of cattle. A portion would be wintered at Turtle Lake. Eighteen acres of summer-fallowing had been sown on Poundmaker's and nine on Little Pine's, but not harrowed sufficiently to destroy and remove the weeds. No new breaking, but fifteen acres of fall-ploughing had been done on both reserves. Some new fencing had been made. Hay stacks had good fences and fire-guards around them. Part of proceeds of beef money had been invested in the purchase of two new wagons, three sets of ox harness and hay forks, axes, clothing and blankets. The house and stables on both reserves were visited. The houses were clean and comfortable, especially so on Little Pine's; they had been newly plastered and nearly all whitewashed, and a kiln of lime had just been burnt to complete the balance. The women and children were comfortably clothed.

On Poundmaker's, and especially in Yellow Mud's Village, the bedding in some of the houses was dirty and also the children. They gave the excuse that they had no soap.

The cattle were looking very well. Poundmaker's herd numbers 144. Last year there were 150; about 16 had been killed for beef. Forty-five very good sheep. In private stock, this band had 30 horses. Home farm had two horses, three oxen, five bulls, two cows, one steer, one heifer, one bull calf and two heifer calves. Little Pine's herd numbered 157, as against 98 previous year; about 16 had been killed for

beef. Most of the cattle missing at last inspection had turned up; they had wandered across the river. Lists of individual holders were sent with live stock returns.

The Indians appeared cheerful and contented and had no complaints. Here, as elsewhere, the women were pleased to be called upon at their houses, and were always glad to show anything extra they had in the way of improvements. I found them generally doing something—sewing, knitting, making moccasins, or doing bead-work—but one seldom meets with any of the lazy kind, who only sit and smoke. When such is the case, house and children are sure to be dirty and untidy, but I am glad to be able to say that, after being in every house from one end of the country to the other, this class of lazy people is getting smaller and smaller every year, and the improvement during the past four or five years is very marked. My next point was

Thunderchild's, No. 115, *or Farm* 13*b*,

Mr. R. Finlayson being farmer in charge. A new store-house, log, shingled roof, good floor and building, has been willowed and plastered outside; size of building, 18 x 22, with an upper floor, two windows downstairs and one upstairs; whitewashed; a nice dry place for goods. The lumber of the old store-house had been used to make an implement shed. The old building formerly used as an office is now used as a ration-house. A new windlass had been erected. The old stable had been pulled down and a new one built, 20 x 27; also, an implement shed, 14 x 20, and a new cattle stable, 20 x 20. The farmhouse had been painted inside and the doors and windows outside, Mr. Finlayson doing the work himself. A fence had been put around the school building. There was a good garden. Ten acres of new land had been broken and twenty-five acres summer-fallowed. Hay put up at Round Hill, 450 tons. Stables were put up at Round Hill also, as some of the cattle would be wintered there, instead of hauling the hay. These stables I will refer to after I have seen them on my way to Onion Lake. A house had also been put up for the men in charge of the cattle there.

The crops put in were,—wheat, 80 acres; oats, 7; barley, 5; potatoes, 4; turnips and gardens, 3; total, 99, being 101 acres less than the previous year. The crop harvested was,—wheat, 90 bushels; potatoes, 70 bushels; turnips, 40 bushels, and other roots, 15 bushels. Three new houses and two stables had been built and a number of old ones enlarged and repaired. Some had stanchions. The houses were all whitewashed but three, and they were being done. The Indians purchased with beef money four sets of ox harness, three cross ploughs and clothing.

Chief Thunderchild said his Indians were working well, I visited every house and stable on the reserve, and found them all in excellent order, being clean and comfortable, and as all had fires in the open chimney the places looked bright and cheerful. The chief's house is a roomy one. There were three bedsteads with a good supply of bed clothing, a large cook-stove, a table and two benches, the last named I got his son—a pupil in the industrial school—to make for his father. The house was clean and fit for any one to live in.

Ottowwan has a small house, it was clean, having been newly whitewashed outside and in, and one bedstead in one corner and a bed on floor in another, open chimney. There were no chairs nor table, but these old people prefer sitting on the floor.

At one house, "Meetoose," I counted fourteen fox skins. Rabbits were plentiful and it was no uncommon thing to see from twenty-five to seventy-five of these skinned and hung up. With the fair rations these Indians were receiving, along with what they could get from the hunt, they were well-off for food. The fields looked well and fences were good, but extra efforts would require to be made to keep weeds down. I took an inventory of articles in hands of farmer, and checked his books. Mr. Finlayson makes no pretensions at keeping books, but he was in the main pretty correct, and deserved credit for doing so well. The cattle were in good condition. The herd numbered 162 head, as against 151 the previous year.

Twelve head had been killed for beef. In private property the band had forty horses. The farm stock consisted of two horses, one cow, one steer, three bulls, and one heifer. The Indians sold wood, lime and charcoal in Battleford. This reserve I considered to be in good shape, and it was unfortunate the crops had not turned out better than they did. Names of individual holders of cattle were furnished with the stock returns.

Moosomin Reserve, No. 112, *or Farm* 13*a*,

was next reached, Peter Tomkins being the farmer in charge. A new store-house had been put up, one and a half story 22 x 20. Shingled roof, willowed and plastered outside and painted with lime inside; one window downstairs and two upstairs. A small blacksmith's shop had been put up and stable mudded, a shed for boiler and engine between the old and new stores had also been put up, the binder is also stored in this place, also mower and rakes. The crop put in on this reserve was: wheat, 103 acres; barley, 5; oats, 13; potatoes, 6; turnips, 3; gardens, 2 acres (or 14 gardens); total acres, 132; being 5¼ acres less than last year. The crop harvested was: 300 bushels of wheat, 20 bushels oats, 60 bushels potatoes, 6 bushels of onions; other roots consumed during the season; 450 tons of hay were stacked at Round Hill and on the reserve; 10 acres of new land were broken and 30 acres summer-fallowed. Three new houses were built, one with shingled roof, one new stable built and some old houses and stables had been pulled down and rebuilt. The well in the coulee gave a good supply of water, which was a convenience being near the stables and houses, a number of places had been graded and levelled with the road scraper borrowed from Sweet Grass Reserve. The horse stable had room for eight horses. The cow stable had stanchions; a good windlass had been put up for killing cattle. The Indian houses were all visited and were found in very good order, a few had not been whitewashed, but these were to be done very shortly. The old chief was very polite. White Cap had a fine new house, shingled roof, good floor, ship-lap gables, good doors, all the work of which was done by himself. Had a cook and box stove, three bedsteads, tables and chairs. Had a good well dug by himself, good stables. I found in nearly every house I entered women making moccasins, knitting or sewing; one seldom meets with those who only lie on the floor and smoke. I noticed a marked difference in this respect during the past five years. The usual inventory was taken of property in hands of farmer. The cattle were in good condition. The herd numbers 109 head as against 103 last year; about 16 head had been killed for beef. Names of individual holders were sent with the returns. There were 22 very good sheep and the Indians had in private property 30 horses and one heifer. Home farm, four horses. The Indians here make various articles such as fork and axe handles, ox yokes, hay racks, &c.

The agency warehouse had been well attended to by Mr. McNeill. The building is an old one and is not worth expending much on in the way of improvements. The bacon supplied by A. MacDonald & Co., of Winnipeg, was of choice quality, also the flour from the Ogilvie Milling Co., both being satisfactory in every particular.

The office work was, as usual, well performed by Mr. McNeill.

The private earnings of the bands were as follows:—

Stony	$531 75
Red Pheasant	945 67
Sweet Grass	497 99
Poundmaker's	317 70
Little Pine's	211 04
Thunderchild's	215 05
Moosomin's	419 41
Total	$3,138 61

The population, births and deaths were as follows:—

	Population.	Births.	Deaths.
Stony	77	4	9
Red Pheasant	128	4	3
Sweet Grass	132	4	16
Poundmaker's	113	9	3
Little Pine	117	3	...
Thunderchild's	166	5	6
Moosomin's	111	4	8
Total	844	33	45

The health of the Indians at the time of inspection was very good. The farmers were all doing their work well, and it is needless to say that Mr. McNeill left nothing undone in the office, and I was pleased to hear of his promotion shortly after I had left there. The agent continues to give his undivided time to the duties of his position, and appeared to be more active than ever in attending to the various matters requiring supervision. I considered the agency in a good position, and the Indians making satisfactory progress. They had no complaints, which is good proof that they were well attended to.

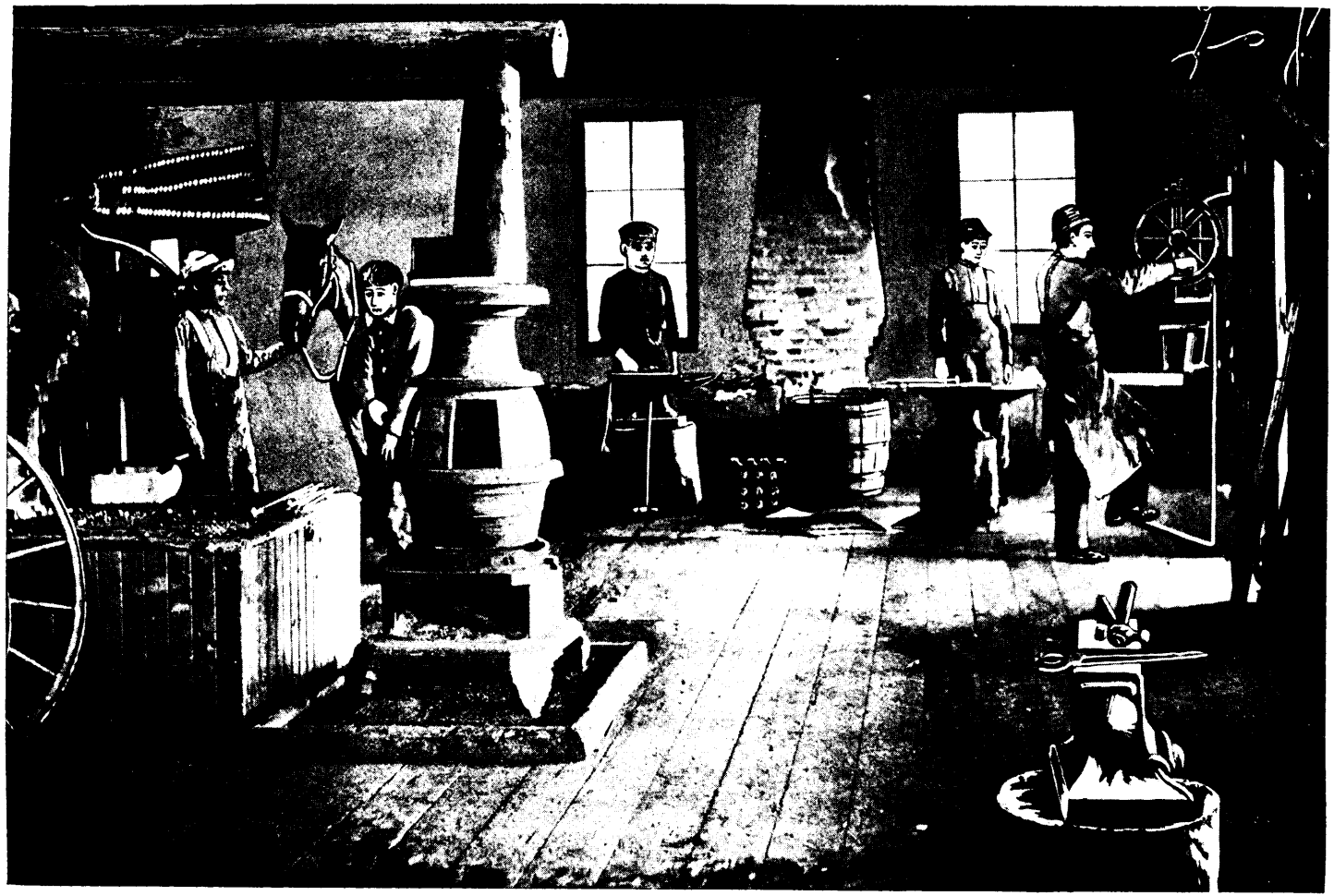
On my way to

Onion Lake Agency

I visited the Round Hill stables and hay stacks, also those at Turtle Lake. I found the full quantity of hay as reported, at all the points, and the quality of hay was of the very best, having been cut and stacked at the proper time. The first place reached at Round Hill was Thunderchild's ranche, where I counted 100 head of cattle and more were to follow in a few days, to be wintered here, instead of hauling hay some twenty-five miles. A house 20 x 20 had been put up for the men in charge. A stable had also been put up, with rails and sod. It has two compartments, each 30 x 30, with rails and hay on top, good corral and a good-sized lake close to the stables. The place was well sheltered with bluffs, so that the stronger cattle could get along very well outside, whilst the cows and calves and heifers could be stabled. Three men and their families were in charge here. The cattle were looking very well, and were still feeding on the prairie. The stacks of hay were in the valley and were strongly fenced, and fire-guards ploughed around them.

About three miles further on Moosomin ranche is situated; a good sheltered spot, and a running stream from a never-failing spring passes on one side, so that the cattle have no trouble in getting the best of water. A stable, 30 x 30, had been put up and a good corral; 111 head of cattle were here—all in splendid condition. The hay was stacked all around; stacks well made, fenced and fire-guards ploughed around them. A house, 20 x 20, had been put up for the men in charge. The house was clean and comfortable. Two men and their families were in charge, but, of course, the ranches are visited regularly by the farmers, and occasionally by the agent.

The next point reached was Turtle Lake ranche, Peter Taylor, with five Indians and their families, being in charge; 150 head of cattle belonging to Poundmaker's and Little Pine's herds were here, and more were to come—all looking very healthy and strong. Twenty-three large stacks of hay were in the vicinity, but little was being fed, as the cattle could pick up good feed on the hill-sides, although there was a good deal of snow on the ground. The water here, too, was plentiful and easily attained. There was a house for Mr. Taylor and two for Indians on one side of the ravine, and another for Indians on the other side, formerly used by Sweetgrass's men, who were not sending any cattle to this ranche this winter. This place affords splendid shelter, and the cattle passed through the pre-



BLACKSMITH'S SHOP, BATTLEFORD INDIAN INDUSTRIAL SCHOOL.

vious winter without a single loss. There would be stable room for 120 head, including Sweetgrass's old stable. Mr. Taylor was taking special care of the young beasts and any not so strong as others. This is a splendid location for hay, water and shelter, and plenty of timber to put up sheds and stables. The houses were clean and comfortable, and everything was in good shape. There is a half-way house and large stack of hay near a lake, where cattle can be fed and wintered going and coming from the reserve to the ranche. A separate stable for the work oxen used in hauling the hay and for the horses is also at the ranche, so that everything has been done for the comfort of man and beast, excepting not stable room enough for all the cattle.

The Industrial School, Battleford,

was the next place inspected, after the agency. The staff consisted of:

Rev. T. Clarke, principal.
J. M. R. Neely, assistant principal.
Miss C. A. Gibson, matron.
Miss M. M. Smith, governess.
Miss Nellie Hayes, seamstress.
D. J. McKenzie, shoemaker.
A. MacDonald, farmer.
V. Taylor, cook.
L. McDonald, laundress.
Miss Wrightman, hospital nurse.
Susan Baptiste, assistant laundress.
Sarah do
A. Goodfellow, carpenter.
Gilbert Bear, printer.
Sarah Bank, baker.
Caroline Britton, assistant baker.
Susette, nurse.
Phoebe Kakasso, assistant nurse.
A. Sufferin, night watchman.
Mr. McKay, clerk and instructor of band.

The crop put in on Eagle Hill's farm was:—

Potatoes,	3	acres, yielding	75 bushels.
Barley,	1	do	nothing.
Oats,	5	do	do
Wheat,	2	do	do

Home farm had oats, 5 acres; barley, 3 acres; potatoes, 3 acres; turnips, 1 acre; wheat, 3 acres; pease, carrots and onions, ¾ acre. The grain was a failure. The root crop was consumed during the season. The cattle were looking very well. The list was: horses and colts, 4; oxen, 8; bull, 1; cows, 19; steers, 7; heifers, 6; calves, 12; sheep, 24; pigs, 21. The various buildings were in good order. The baking is attended to by Sarah Bank, and Caroline Britton, two of the pupils. The place was clean and the bread made was of the best quality, and the whole work was well done. The flour was from the Ogilvie Milling Company, and was of choice quality. A stone foundation has been put under the building. The laundry was also in good order, and it, too, had a stone foundation put in. The new cottage for a blacksmith has not been completed. It required to be plastered. It contains sitting-room, dining-room, two bed-rooms and kitchen. The building is framed and shingled roof and stone foundation. The pig pen was a comfortable place. The sheep had a nice place also. The stack yard contained two large stacks, equal to about 50 tons of hay. The horse and cow stable was in good order, and this had a

stone foundation put in; also, a lean-to at an end of the recreation building (now used as a carpenter shop) for the storing of implements and tools in hands of the farmer. Boys' water-closets were in good order. Blacksmith shop and shoemaker's shop were in good order. Printing room and paint shop are in the same building. The hospital was visited. The boys' ward had four beds and the girls' five. Four boys and three girls were being treated, principally for sore eyes and ring-worm. There is a nurse's room. Dispensary also used as a dining-room and kitchen in basement.

The boys were putting a porch on the door leading to the basement. A new poultry house had been put up since last inspection, and a new porch on the front door of the principal's house. The carpenter's shop, with all its contents, had been burnt down during the year,—the first loss by fire I had to record in all my work over every agency and school in the Territories during nine years, and this speaks well for the care and management of employees generally. The produce store was in good order, also the dry-goods room in the main building.

The various rooms and dormitories in the main building were examined from basement to attic, and all were found in good order.

Boys' dormitory, No. 1, had 23 beds; No. 2, 19 beds; both had been kalsomined, the work being done by the boys, and well done; matting on floors. Dormitory No. 3 had eight beds; also kalsomined. Beds were clean and were neatly made; each bed had a palliasse, sheets, blankets, pillow and counterpane, and boys had night-shirts. Bath-rooms were in good order and tanks full of water, also fire-buckets in various places in the building.

Rooms for the staff were all neat and clean. Girls' dormitory, No. 1, had three beds and washstands; this room was for the older girls. No. 2 had six beds; No. 3, five beds; No. 4, eleven beds. All these rooms had been newly kalsomined, and had matting on floor. No. 5 had five beds and No. 6 eight beds. All beds are iron, with spring mattresses. A number of the girls had pictures and mottoes on the walls near their beds, and the rooms looked bright and cheerful. Babcocks and grenades were placed at various points in the building. The dining-room contained five tables for girls and five for boys. Kitchen was in good order; range and pump working well. The meals were well cooked and were served hot. The basement was used as a recreation room for the girls. There are wash-basins and two large tables and desk for writing, &c.

The windmill was in good working order. The old clothing condemned last year had been sent to the various reserves, some thirty-five sacks full, and a similar lot would be sent after inspection.

An inventory of all property was taken and the books checked and each account balanced, after writing off worn-out clothing and other articles which had become useless. The carpenter's, blacksmith's, shoemaker's, farmer's and painter's books were also examined, to see that all issues from stores were properly accounted for. Five boys were learning shoemaking, and were doing good work, the instructor being well pleased with their progress. Johnny Wright is the painter, and Gilbert Bear the printer. Twelve boys are learning carpentry, and some of them are excellent workmen. About as many follow the blacksmithing trade, and others are farmers. There is a tendency to put the brightest boys at trades, and making farming a second consideration. This is a mistake. If our Indians are to compete with white people, they must do it in farming as well, if not more so, than in trades, and instead of this branch having a second place, I would like to see some of our best boys take a year or two at one of the experimental farms.

The best of order is observed at meals and I noticed that no hot dishes were placed on the table until all the pupils had been seated. Seven cows were being milked and a little butter is made, but not enough for the use of the house. The beef supplied was of very good quality, and was reasonable in price. There would be no potatoes for the pupils during winter. The number of pupils in attendance was 102 (boys 56, girls 46). The work proper of the school will appear in school report, but I would just mention that the examination was highly satisfactory, and showed carefulness on the part of Mr. Neely and Miss Smith. The discipline was

all that could be desired and the pupils were receiving the fullest justice. The classes were well arranged, and both departments, boys' and girls', are conducted in an orderly manner. Some of the elder pupils had taken situations as servants with families in Battleford.

The matron, Miss Gibson, was deserving of all praise for her share of the work, and Miss Hayes, the seamstress, was doing good service in teaching the girls sewing, mending and making dresses. Miss Taylor, the cook, was also doing her work in a business-like way.

Detailed reports with returns and statements were forwarded to the commissioner, Regina.

My next point was

Onion Lake Agency,

arriving there on 16th December, 1894.

G. G. Mann, agent.
John Carney, general assistant.
John Bangs, interpreter, and in charge of department herd at Long Lake.
Miss Blanche Mann, acting clerk.
Joseph Taylor, an industrial school boy, carpenter and assistant at the mill when it is in operation.

The new building for warehouse had been completed; it is commodious and has been well built; it is 60 x 22, one and a half story, frame, shingled roof and painted. One end is used as a ration-house and the other end on ground floor for storing flour, bacon and other heavy goods, and the upper flat for lighter goods, shelving and tables being provided for dry-goods and small articles. The whole place was in excellent order and things arranged in a business-like way.

A new blacksmith and carpenter shop, 40 x 18, frame, had been built and the old log house pulled down, and the old building formerly used as a blacksmith and carpenter's shop is now used for storing buckboards, mowers, rakes &c., and it had been sheeted over on the outside with dressed lumber. The old store and ration houses had been taken down. A strong new corral had also been made. The horse stable had been improved by changing the stalls: these are now so arranged that the horses can be fed from a passage running along the front. There are nine stalls. The ox stable was also in good order and is a comfortable place for the cattle. The sheep shed, piggery and poultry-house, were all in good order. A large quantity of hay was stacked in the hay corral, near the stables. The whole place was in splendid shape, reflecting credit on Mr. Mann's good taste and management. The mill was also in good condition, the whole building having been thoroughly cleaned up after grinding had been completed; 1,000 bushels of choice barley were stored in bins for next year's seed, also some wheat. A large quantity of sawn lumber was on hand, neatly piled, ready for use. About 100 tons of straw were in stack, affording capital feed for the cattle. A quantity of bran and shorts was also stored in the mill building.

The crop put in by Band 119, was as follows :—

	Acres.
Wheat	33
Barley	282
Potatoes	15
Turnips	10
Gardens	4
Total	344

being 136 acres less than the preceding year. The crop harvested was: wheat, 205 bushels; barley, 1,452 bushels; potatoes, 900 bushels; turnips, 300 bushels.

Garden produce chiefly consumed during the season, but some of the Indians had onions stowed away with their potatoes and turnips for winter use.

The crop put in by Band 124, was:—

	Acres.
Barley	10
Potatoes	3
Turnips	½
Gardens	1½
Total	15

the same as last year. Fffty bushels of barley and 150 bushels of potatoes were harvested. Garden produce consumed during the season.

Home farm had in crop: oats, 10 acres; barley, 10¼ acres; potatoes, turnips and garden, three quarters of an acre, and the yield was:—

	Bushels.
Oats	150
Barley	89
Potatoes	180
Turnips	100
Carrots	15
Onions	3

		Tons.
Hay cut and stacked for farm stock and departmental herd		1,500
do	Band 119 herd	1,200
do	Band 124 herd	700
Total		3,400

The stacks were well made, strongly fenced, and fire-guards ploughed around them. A quantity of hay was on hand, left over from last year. The cattle are all in good condition. Band 119 herd consists of:—

Oxen	67
Cows	121
Steers	70
Heifers	28
Bull calves	57
Heifer calves	47
Total	390

as against 349 head the previous year. Seventeen head had been killed for beef, 11 head sold to Saddle Lake Agency, 11 head transferred to department herd, 15 head returned to agent. In private stock the band has 57 horses.

Band 124 has 111 head as against 98 the previous year, 10 head having been killed for beef. In private stock this band has: horses, 62; oxen, 13; bulls, 2; cows, 51; young cattle, 104. Names of individual holders accompanied the returns in each case.

Band 119 has 110 very fine sheep and 14 pigs. The department herd consists of:—

Bulls	6
Oxen	11
Cows	223
Steers	159
Heifers	84
Bull calves	84
Heifer calves	97
Total	664

The number last year was 480; 51 head had been killed for beef. From a statement which I prepared (but which space will not permit to put in detail in this report) of the cost of the herd from the first to the date of inspection, and taking the present number of cattle at a fair valuation, it showed a profit of $15,061.12. This does not include value of stables, which are worth about $2,000, and enough hay on hand to feed the cattle until the spring of 1895.

In company with the agent I visited the various stables at Long Lake, and counted the cattle. It took us a week to go and return. We camped first night at Frog Lake, which is 20 miles from the agency. We then proceeded to No. 1 stables, or ranch, which are 40 miles further on from Frog Lake. I found the stables comfortable and suitable in every way for the purpose. Most of the cows and all of the young heifers are kept here—over 200 head. Stanchions are provided for 150 cows, and loose stalls and shed room for double that number of cattle. The stables were clean, and everything around was in good shape. This was all the more satisfactory from the fact that our visit at the time was unexpected. Mr. Bangs and five Indians were in charge. Four of the men had their families. There are three houses for the men, and these were clean and comfortable. A house, stable, and store-house had been put up during the year. The store-house was for keeping the mowers, rakes, and other implements, and occasionally beef is stored in it. There are large hay corrals, and there is a splendid spring a quarter of a mile from the stables where cattle can go for a drink at any time. The hay is stacked in the vicinity, and it was choice, being as green as when growing. The cattle were looking healthy and strong.

We then proceeded about four miles further on, to No. 2 ranch, where all the stronger cattle, such as steers and the older heifers, are kept—about 230 head in all. The stables here were built during the past summer, and for convenience and comfort are unsurpassed in the Territories. The stable proper is in the shape of a semicircle. The outside is 360 feet, with racks all along, and the cattle feed through an opening in the wall. The stable inside is 15 feet wide and 10 feet high. A shed adjoins the whole length. Inside this shed is 16 feet wide and 10 feet high. There is stable room for 400 head and shed room for as many more. A large corral adjoins. The stables are nicely located, being protected from the north-west winds by bluffs and from the north-east by a high hill. There is a good creek near the place and a lake eight miles long and six wide within 400 yards of the stables, so that a plentiful supply of water can always be depended upon. Hay is stacked in the vicinity. A sleigh can be taken in at one end of the stable and driven along, clean up the manure, and go out at the other end. About 100 tons of hay were stacked alongside of the hay racks, but this is kept as a reserve, to be used in stormy weather, when hauling would be difficult. The loads of hay, as they come from the stacks, are driven along and the racks are filled in unloading. There is a neat little house for the men; wooden floor. Five men are in charge here, but all under the supervision of Mr. Bangs. The agent makes monthly visits, and oftener if required. One end of the shed is boarded off for the work oxen. I have no hesitation in saying that these stables and sheds are the finest in the country, being strongly built and the arrangement perfect, reflecting much credit on the agent, who designed them, and on Mr. Bangs, who built them. I only wish that more of our agents and farmers

had the same ideas of how cattle should be housed and cared for. It is a fact pretty well understood by most people that cattle warmly housed will consume about one-half the food than if left to shiver alongside of a rail fence, and it is also getting to be understood that the farmer who does not provide proper shelter for his cattle is no farmer. The hay was of choice quality.

We now proceeded to No. 3 ranch, 15 miles further on. The stables here are exclusively for calves. The stable is the shape of the letter L, and is situated on the shore of Little Long Lake. The stable is 200 feet frontage, with racks, same as at No. 2. Hay stacked all along in front of the racks; six good doors, and when these are closed at night the place is warm and comfortable, and perfectly dry, bedding being made of waste hay. The balance of the hay was stacked within a mile of the stable. There is a large corral, but the calves were among the bluffs, and many were feeding on the long grass which could be seen above the snow. A stall for the oxen, and a good house for the men. Two men are in charge, and occasionally three. Mr. Bangs made a new road from No. 1 ranch, and brush and timber had to be cleared for nearly 20 miles. There were nearly 200 calves here, 7 cows, and 2 oxen. The calves were a splendid lot and were in the best of condition.

Some of the hay here was not so good as the rest, as from want of another mower it had to be cut late. It may be asked why have so many stables so far apart? Why not have them all together? This, to my mind, is where Mr. Mann's good judgment came in. In the first place, in case of fire, if one stable were destroyed, the cattle could at once be taken to another stable. In the matter of hay, too, it is best not to depend on one locality. There are other reasons, but these two are sufficient to show the wisdom of the present arrangement. Mr. Wood returned to the agency.

In going from house to house over the reserve, I could notice a general improvement all along the line. I did not find one house that could be called dirty. Most of them had been newly scrubbed, and all had been whitewashed, and there was evidently a desire on the part of all to have nice places to live in. I noticed new doors in many, and beds and tables where none were before. The greatest improvement, however, could be seen in the stables, many had been enlarged, and new doors put on, and all had good strong corrals, and generally a stack of hay in them. The cattle were in fine shape, and each Indian seemed to be careful of his cattle. The agent and myself took a drive one night and found in every case cattle were housed, and doors properly shut.

I found many of the women busy making moccasins, some sewing, some baking and others scrubbing; in fact, one seldom meets with an idle person in this agency, and at the same time they are cheerful and happy. Not one of them had a word of complaint to make. About 100 acres of land had been summer-fallowed, and 200 acres fall-ploughed. I noticed also an improvement in the fences; few, if any, crooked ones can now be seen. The amount of work done in this agency is good proof of the progress going on, and, if the crops were not up to the usual standard it was not owing to any fault on the part of the agent or his Indians. Flour of their own raising, after reserving seed for next year, would serve the whole band for nearly three months. Four wells had been dug at different points on the reserve, and were giving a good supply of water. The private earnings of the two bands were $1,152.56. The usual industries had been carried on. Baskets could be made in any number, but there is no sale or market for them. Hay racks, sleighs, fork and axe handles and many other things were made. The hunt had been fairly good and was expected to be better than usual during the winter. The births and deaths were:—

	Births.	Deaths.
Band 119	26	15
" 124	10	3
Total	36	18

The population of Band 119 was	512
" 124 "	176
Total	688

The health of the Indians at the time was good, as I only found one case of sickness and that was a young child. A few old women were complaining of sore eyes. No doctor has been here for a year. The medicines are kept in Mr. Mann's house, and are conveniently arranged in a cupboard, all bottles being neatly labelled. Mrs. Mann gives her personal special attention to this important part of the work. The "Restaurant" is a convenient place for Indians to take their meals in when working around agency or the grist and saw mills. The warehouse was in good shape. The flour from the Ogilvie Milling Company was choice, also the bacon from A. Macdonald & Company, Winnipeg. The total number of cattle killed for beef from 1st December, 1893, to 31st December, 1894, was 59 head, producing 41,822 lbs. beef, and 1,698 lbs. offal. The beef was of choice quality and was well butchered.

The office work was well done by Miss Mann, and books were neatly and correctly kept and were written up to date. A new building for a school at the Roman Catholic mission, was in course of construction, to take the place of the one burnt down. The Church of England mission was being improved by the addition of two porches. The implements were well cared for by the Indians, and any ploughs or other articles requiring repairs were brought to the agency to be put in order during the winter. This is better than leaving them out in the snow.

The total number of live stock in this agency is as follows:—

Cattle—		
Department herd	664	
Band 119 herd	390	
Band 124 do	111	
do private	170	
		1,335
Horses—		
Agency	39	
Band 119	57	
do 124	62	
		158
Sheep—		
Band 119		110
Pigs—		
Agency	6	
Band 119	14	
		20
Grand total		1,623

This agency, looking at it from the work done—its churches, its schools, its grist and saw mills, commodious and comfortable houses and stables, and carpenter and blacksmith shops, splendid herds of cattle and every care taken of man and beast—I consider it a model agency.

The agent, Mr. Mann, continues to discharge his duties with ability and good judgment. The agency was in good shape and the Indians contented and happy. The usual detailed report, with statements, returns, &c., were forwarded to the commissioner, Regina. I now proceeded to

Saddle Lake Agency,

Mr. Mann kindly driving me, and arrived there on the 5th January, 1895.

Mr. John Ross, agent; Mr. G. H. Harpur, clerk; Norman McDonald, teamster and interpreter.

The agency horse stable had been improved by raising the walls four and a half feet and by adding a new floor, new stalls and other repairs. There was room for four horses, and it was comfortable in every way. The cow stable had also been raised in the walls and a new roof put on, also a new floor, and it was supplied with stanchions and the arrangements for feeding were good. A hen-house had also been put up. The office (the old farm building) had been repaired during the year. A porch on the front door and one on the kitchen put on. The clerk's quarters are in this building, Mr. Harpur being still a single man. Storm sashes were to be provided and the kitchen was to have a new roof put on. The ration-house, store-house, blacksmith shop, sheds and stables have all been whitewashed, and everything about the place was in excellent order. A pasture of 133 acres had been fenced in on the south side of the creek for the agency stock, and other fencing around the place had been extended and repaired. The whole place was a model of neatness and careful management.

Saddle Lake Reserve, No. 125, was the first inspected. The crop put in was 89½ acres: of wheat 35, barley 49, potatoes 2½, turnips 2, carrots ½ and onions ½, being 7½ acres less than the previous year. The crop harvested was: wheat 110 bushels, barley 182 bushels, potatoes 80 bushels, carrots and onions 40 bushels. The Indians were reported as having taken good care of their gardens. Hay put up, 620 tons, and 80 tons for agency stock. The hay was of a choice quality, but more ground had to be gone over than usual in order to secure the needed supply. Some new breaking had been done and 70 acres had been fall-ploughed. Fences straightened and repaired. The cattle were in good condition, the herd numbered 76 head, as against 70 the previous year, about 10 head having been killed for beef. In private stock the band had 32 horses, 2 oxen, 56 cows, 33 steers, 12 heifers and 24 calves, making 235 head of stock to be provided for. The band has some pigs and were to get some sheep shortly after I was there. Six children from this reserve attend Red Deer Industrial School, and one the Boarding School at Lac la Biche. Each house and stable on the reserve was visited. The houses, without a single exception, were whitewashed outside and in, and were otherwise clean and comfortable, and, in most cases, well furnished with stoves, bedsteads, tables and chairs; and bed clothing seemed to be plentiful. Open chimneys were the rule in the houses. The stables I found in most cases, very good, affording ample shelter for the stock, but there were one or two places where stable and shed room had not kept pace with the increasing herd, and consequently some of the steers had to find shelter in the bluffs; but these defects were to be at once rectified. The headman had three creamers, milks ten cows and makes butter, has poultry and pigs. A number of the other Indians made butter also. The stables had been mudded and had a good corral, and good provision was made for watering the cattle.

Augustine Steinhauer, one of the band, had removed to Cache Lake about 15 miles on the way to White Fish Lake. He had his own cattle, 43 head, also those of Band 126, 27 head and 10 from agency. New stables had been put up and they are nicely situated in a well sheltered spot close to the lake. There are good hay meadows in the vicinity. Large stacks of hay were fenced in at various places. There was a good house for Mr. Steinhauer and his family; it is 22 x 16. The cow stable is 48 x 32 and had 30 stanchions, these faced each other and cattle are fed from a passage up the centre. One compartment adjoins, for more cows and calves, it is 32 x 24. There are two corrals, one for calves and one for the older cattle. The cattle were in the best of condition. Water-holes in the lake were about 100 yards from the stables.

Mr. Steinhauer was preparing to increase the stable accommodation. There was abundance of suitable timber within a mile of the place. It was late in the season before Mr. Steinhauer settled here; otherwise he would have had stabling for all the cattle, but his time was taken up getting hay cut and stacked, and he deserves credit for his enterprise, and in doing so much work in so short a time. He bids fair to make a success of his ranch.

The school building I referred to last year had been removed to a pretty spot—a short distance from the mission buildings. The building was taken down and rebuilt. Many of the logs had become rotten and new ones were supplied. It is now 23 x 32 and is one of the best school buildings I have seen made of logs. It has six windows, a ventilating shaft, instead of an open chimney, and the teacher informed me that it worked well. The removal of the building has increased the interest and attendance of the school, being now in the centre of the families interested. There were two water-closets, and a porch was to be added to the door. Sunday services are also held in this building. The teacher, Mrs. McKitrick, with the Indians, did all the work of removing and rebuilding, Mr. Ross giving his personal, practical assistance and supervision. This reserve is under the immediate care of the agent. I now proceeded to

White Fish Lake, No. 128,

Chas. DeGear being farmer in charge. The roof of the horse stable had been raised, and this was pitched instead of being flat. The stable has six stalls. The cattle stable and shed were as before, both affording good shelter. A small verandah had been put on the farm house, and the cellar and basement re-arranged and made more serviceable, besides making the house warmer. Storm sashes were on the way from Edmonton for the windows. The buildings were all in good order. The implements were nicely stored away for winter. Some of the ploughs needed repairs, and Mr. Giles was to do these when he could be spared from the mill. The crop put in here was:—

Wheat	117	1-2	acres.
Oats	20		"
Barley	185	1-4	"
Potatoes	19	15-16	"
Turnips	3	5-16	"
Carrots	2	3-32	"
Onions		18-32	"
Total	348	21-32	

being 53 acres more than the previous year. Crop harvested was:—

Wheat	607	bushels.
Oats	51	"
Barley	533	"
Potatoes	595	"
Turnips	138	"
Carrots	14	"
Onions	5	"

Hay cut and stacked, 900 tons; the stacks, as they always are here, were well made and could be seen all along the flats. The quality of the hay was choice. New land broken, 66 acres; fall-ploughing, 78 acres; 300 acres of new fencing had been made and renewed. Six new houses had been built. I spent two and a half days visiting the houses and stables. The houses were all whitewashed, outside and in, not one left undone, and I never found them in as good order, all being clean and comfortable. Some of them were neatly furnished. The stables were, in most cases, very fair, but the accommodation had not increased in proportion to the increased number of cattle, but efforts were being made to have more stable and shed room provided. The cattle were all on hand and were in splendid condition, and not an animal had been killed since last inspection without the consent of the agent.

Peter Shirt had a large new house, 36 x 20, upper floor; boards on hand to put in partitions below, and will have rooms upstairs when he can get more lumber. Has a new stable, but not large enough to hold all his cattle, some 13 head, department and private. The old stables are of little or no use. Peter Shirt is one of the most enterprising men on the reserve. He asked me for a clock for his new house. I told him if I ever came again and found that he had stabling for all his cattle so as to be an example to the others, I would give him a clock. He said he would get logs out at once for the purpose. I will fulfil my promise so soon as I hear from the agent that the work has been done, as I am not going there this year.

John Whitford had put an open chimney in his house and he found it, as I told him last year, a great improvement. The house had beds, tables, chairs and other furniture, all very clean, and had good stable well mudded. Has 2 government cattle, 15 private. Had a mower and rake, makes butter, asked for a churn. Thrifty and comfortable-looking place.

John Hunter, head man, had a good house and stable all in good order. He is a fine old man and never gives any trouble, always willing to carry out what is wanted.

Hardisty had the neatest and most comfortable little place on the reserve, had only three head of cattle and he takes the best of care of them. I complimented him and gave him a plug of tobacco and he felt quite proud. The corral around the stable is made of brush so that his cattle are well sheltered when not in the stable.

Peter Blood has a good house, but too small for his large family, but had lumber on hand for a new house. Has a good implement shed, three cow stables, and one for oxen, and another for calves. Two of the stables had wooden floors and large corral, 15 head of cattle, looking very well. This man is enterprising, and is a good worker. These are fair specimens of the other places visited. The house of Chief Pakan was in splendid shape, clean, neat and well furnished, with beds, tables, chairs, stoves, bedding, &c. Had some good new sleighs. Piles of boards were on hand for partitions in the house. The washing had just been done and the clothes were hung around the stoves to dry.

Has a lot of private cattle of his own and his sons', but had only stable room for half of them. Was to commence at once and provide temporary sheds, and will build sheds in the summer. I asked him how he would like to lie at the back of a rail fence when it was 25 and 30 below zero. He acknowledged it was wrong to be less careful of the cattle than of himself. The chief said he was thankful for the wagons he got last year, and for the sheep promised in the spring. He said he would see that plenty of logs would be got out for new stables.

John Sinclair had a nice house and new shed adjoining. This man makes good chairs, and supplies others with these; he asked for a few tools, which the agent was to send him; asked also for some paint, to paint the chairs. I asked him to make one and any other articles, and the agent would send them to the fair to be held at Regina. The man is a cripple, and is handy with tools, and deserves to be encouraged.

Enoch Wood has a very nice house. Had wheat and barley enough to furnish flour for the whole year. Had six head of cattle; good stabling; also a calf stable and a piggery.

The herd was as follows, all looking very well:—oxen, 34; bull, 1; cows, 49; steers, 21; heifers, 16; bull calves, 15; heifers, 17; total, 153.

The number last inspected was 113.

In private stock the band had:—130 horses, 1 bull, 71 cows, 38 steers, 27 heifers, 27 bull calves, 21 heifer calves; total, 315; making 468 head of stock to be provided for, and held by 38 families. Names of holders were sent with returns.

The new store at the mill, built since last inspection, is 40 x 24, one and a half story; flooring and plastering required to be done. Five hundred sacks of flour were ground the previous winter, which the Indians received along with the bran and shorts, and nothing kept back to pay expenses incurred in other undertakings. The mill was stopped at the time owing to the water supply being insufficient, and it was contemplated to move the mill to the shore of the lake. A well had been

dug to the depth of 30 feet, but no signs of water could be seen. Ten hundred and twenty-nine logs were got out last winter, from which 72,841 feet of lumber were sawn; 20,000 feet was the agency share, and the rest the Indians got to fix their houses, make tables, beds, partitions, &c., &c.

The agency portion was used in making repairs to the schools, and in building the store-house at the mill, repairs to the stable, farmhouse, &c. The two schools on this reserve were in a flourishing condition. A festival provided by Rev. Mr. and Mrs. Glass took place at Whitefish school at Christmas, and songs and recitations by the pupils were gone through with considerable interest and pleasure to the parents. A similar gathering was to take place at Goodfish school on the evening of the 17th January. On our return we camped at this place on the night of the 14th and the teacher had the pupils and parents assembled, when the programme was rehearsed. The children did uncommonly well, and it was amusing to hear these dusky little boys and girls sing in ringing tones the "Blue Bells of Scotland." The parents were delighted. Both school buildings were decorated with evergreens, flags, and mottoes and they looked bright and cheerful. The services at both schools on Sunday were well attended and the singing was particularly good. Apow, one of the band, conducted the service in the morning at Whitefish, and John Hunter, another member of the band, preached at Goodfish school in the afternoon; both times the places were crowded. Rev. Mr. Glass conducted a third service in the morning in the centre of the reserve and had a good attendance. The school buildings are situated one at one end of the reserve and one at the other. The Indians were fairly well clothed, excepting the children, some of them were ragged. The women as a rule were busy knitting, sewing, making moccasins and some were tanning hides; a neater, cleaner lot of houses cannot be seen anywhere. They had not as much flour of their own this year and therefore felt the want of this. Fourteen children from the reserve attend Red Deer school and one the school at Lac la Biche. I found the Indians pleasant and cheerful and all were pleased to be visited. I had the interpreter with me at every house, so that all had an opportunity to say what they liked. I prefer this plan to meeting them all together, when one speaks for the lot: in fact I refused such meetings unless in very special cases. The whole reserve was in good shape and I consider it one of the most, if not the most advanced bands of Indians in Treaty Six, and so far as I have been able to verify, it gets the least assistance *per capita* in the way of food supplies and clothing of any band in the treaty. Mr. Ross, the agent, and Mr. DeGear deserve credit for the good state of this reserve.

Blue Quill's Reserve, No. 127,

under the immediate care of the agent, was next inspected. The crop put in here was 83⅔ acres, being 8⅔ more than last year. The crop harvested was: wheat, 27 bushels; barley, 177 bushels; potatoes, 80 bushels; turnips, carrots and onions, 52 bushels; hay stacked, 521 tons; new land broken, 5 acres; and 80 acres fall ploughed. Six new houses built; three of these and three stables and sheds near the river to winter cattle. Some new fences made and old ones repaired. In company with the agent and Mr. Harpur, the clerk, and the interpreter, I visited every house and stable on the reserve, and found them in good order. All the houses had been whitewashed outside and in, and all but one had wooden floors, and only in one case did I find beds on the floor. I will give one or two samples:—

"Peepeeksee" was absent, but had a clean, neat house; had a good well and a constant supply of water; children clean and well dressed. Had 12 head of cattle, ample stable and shed room and a good horse stable. Two pair of bob-sleighs and two hay racks. Rents a house to Mr. Tupper, the trader, for $7 a month.

"Wapeenew," nice house, clean and comfortable. He and his two sons had their cattle, 25 head, at the stables close to the creek, near the river; all their cattle and one killed for beef are the offspring of one cow given him as a present for loyalty. The house contained two beds, tables, stools and a number of other house fixings. This is a fine old man, and is living very comfortably. His wife asked for

some tea, and I gave her a pound. The two sons have each a house on the flat where the stables are near the creek, all new. The cattle looked well, scarcely stable room enough for all, but the place was well sheltered and there was plenty of hay; a grand place for a small ranch.

Simon Packawack, house on the banks of the Saskatchewan River, occupied by Peter Bright Eyes, who was in charge of 30 head of cattle being wintered here.

"Little Crane," good new house, and it was clean; has 22 head of cattle and had stable room for nearly all, but he keeps them in the bluffs instead. They were looking well; I told him they would consume less hay if warmly stabled.

The herd of the band numbered 143 head as against 110 last year, held by 16 families. In private stock the band had 20 ponies. I considered this reserve to be in good shape.

Washatanow Band, No. 126.

A few of this band were living at their own reserve and a few are at Saddle Lake Reserve, but the cattle are at Cache Lake, as I have already stated. The number is 27 head.

Chippewayan Band, No. 130,

had 11 head of cattle.

Condemned Stock.

Sixty-six animals were killed in thirteen months, yielding in beef and offal 48,391 lbs., as follows:—

	Lbs.	Lbs.
Of Indians—31 animals: Beef	24,119	
Offal	2,194	
		26,313
Average weight of animals, after dressing, 778 lbs.; offal, 9 per cent.		
J. C. Gordon, contractor—16 animals: Beef	6,765	
Offal	683	
		7,448
Average weight of animals, after dressing, 422 lbs.; offal, 10 per cent.		
Onion Lake Agency—19 animals: Beef	13,535	
Offal	1,095	
		14,630
Total		48,391

Averge weight of animals, 712 lbs.; offal, 8 per cent.
Total, 66.

Individual earnings of the bands have been:—

Band 125	$315 60
do 126	177 00
do 128	661 45
Total	$1,154 05

This is exclusive of cattle sold to the department as above, 31 animals.

Births and deaths have been as follows, in thirteen months:—

	Births.	Deaths.
Band 125	3	3
do 126	...	3
do 127	3	1
do 128	13	15
do 129	1	...
do 130	5	1
do 131	5	7
	30	30

Total population of the agency is 684.

The warehouse had been carefully attended to by Mr. Harpur, and issues correctly made.

The bacon and flour were both of choice quality, and carefully delivered as to weight and quality of sacks.

As regards the office, it is needless to say that the work was well done. Mr. Harpur is most accurate in all he does, and the smallest detail is not overlooked by him. I find everything in the best possible shape. Mr. Harpur attends also to the warehouse, issues the rations, and often makes trips over the reserves for the agent, and he oversees the farm books once a month, so that an audit of the books at the agency has become one of little trouble. The usual detailed report was sent to the commissioner, Regina. Inventories of agency store-house and farm store-house were taken.

The total number of live stock in this agency is as under:—

	Cattle.		Horses.	Pigs.
	Private.	Departmental Control.		
Band 125	127	76	30	5
do 126	.....	27	10	.....
do 127	.....	143	20	2
do 128	185	153	130	20
do 130	2	11½	4	.....
Agency	.....	12	3	.....
Farm	.....	4	2	.....
	314	426	199	27

The agent continues to discharge his duties with care. He is reliable in everything he says, and does not spare himself in the performance of his work. He is thoroughly acquainted with all the details of the various reserves in his agency, and what each Indian is doing, and the best of care is taken of all property placed under his control. My inspection was a most satisfactory one in every respect.

Edmonton Agency.

I now proceeded to Edmonton, Mr. Ross kindly driving me, and arrived at Edmonton Agency on the 28th January.

Mr. Chas. DeCazes, agent,

Mr. A. E. Lake, clerk,

James Foley, interpreter, teamster, and farmer.

The agency buildings were in the best possible order, painted, and whitewashed, and all neat and tidy. Good corrals and fences, and everything in its proper place. The agent's house had been improved during the year. It had been veneered with brick, a stone foundation put in, and the building enlarged by adding two extra bed-rooms, and bath-room and water-closet upstairs; the bath-room being supplied with hot and cold water. An office and library and a new kitchen were added downstairs. The rooms had been kalsomined and papered, a small conservatory placed on the south side of the house, a verandah on the north-east side, and a bow-window in the dining-room—the whole having a neat and comfortable appearance.

A summer-kitchen had been added to the clerk's house. The agent had a splendid garden which I will refer to later on in this report. A number of logs were on the ground for the proposed new mill. The whole appearance of this agency and its surroundings was pleasing, and gave proof of good taste and care in the management.

Enoch's Reserve, No. 135,

was the first inspected. The general improvement reported at my last inspection had been continued during the past year. The houses had all been whitewashed outside and in, and were, without an exception, found cleanly kept. The stabling also was good. The Indians here had all good gardens, and it was reported they took good care of them. The houses had all wooden floors, and bedsteads, tables and chairs, and I could notice in many of them such things as clocks, lamps, smoothing irons, brooms, washboards, dishes nicely placed in cupboards, washstands, towels, home-made patched quilts on the beds, clean pillow-slips, &c., all showing improvement in housekeeping, and advancement generally. There was an air of comfort about the whole of them. Some young men had made a start in farming, and the agent had located them on desirable places, so that general progress could be noticed. I found the men busy making sleighs, stable-doors, and otherwise fixing up their places; and the women were busy knitting and making moccasins. I visited all the houses, and will notice here just one or two as examples. William Ward has a good house, three stables and two sheds; takes care of 20 head of cattle for his mother, and 9 of his own; dug last year a well which gives a good supply of water; hay was plentiful, and cattle were looking well; implements under cover, and was going to build a new implement shed this year. Lazarus has a good house, good stable, and 13 head of cattle, comfortable place. Has two children at Regina Industrial School, and says he is going to send two more.

Daniel has a double house and it was the pink of cleanliness. Has 13 head of cattle, 12 sheep and 7 pigs; good stables; a good well here too. Comfortable place and the children were well dressed and clean.

James Stony has a good house, but a poor stable. Has 10 head of cattle. Has four children at Regina school. This was the only house I noticed with beds on the floor, but he promised to make a bed as soon as he could get the lumber.

Alexander has a neat little house; painted doors. Two good stables; good doors; warm and comfortable. Has a hen-house and piggery, and shed for implements; a good well near a spring, which gives a plentiful supply of water at a depth of four feet. Had a good garden. The Indians, men and women, were cheerful and pleasant, and were pleased to be called upon. They had no complaints, and they only asked for a few nails to make stable doors.

The crop put in at this reserve was: wheat, 50 acres; oats, 47 acres; barley, 70 acres; potatoes, 6 acres; gardens and turnips, 7 acres; total, 180 acres; being 61 acres more than the previous year. The results were: wheat, 390 bushels; oats, 500 bushels; barley, 560 bushels; potatoes, 600 bushels. Turnips and garden produce, no record, but many were stored away for winter use, besides what was consumed during the season. Hay stacked, 450 tons; new land broken, 45 acres; summer-fallowed, 35 acres; new fencing, 150 acres; fall-ploughing, 180 acres. The hay was of choice quality, having been cut at the proper time.

The herd consisted of 150 head, as against 123 last year; about 15 head having been killed for beef, and sold; 37 very fine sheep and nine pigs; and, in private property, the band has 60 ponies, 4 cows and 6 steers. Names of individual holders of cattle were sent with returns. The cattle were properly branded. This reserve was in splendid shape.

Michel's Reserve, No. 132,

was next reached, during one of the stormiest days experienced in many years in this place. The agent being laid up with a very bad cold, Mr. Lake came with me instead, on this trip, and we had often to walk up to the waist in snow, as the horses could hardly get through with empty sleigh; however, we reached our destination none the worse for our tramp. We had, however, to get an Indian to go ahead on horseback to point out the road, as not a track could be seen. Some old-timers lost themselves and had to return to where they started from.

The crop put in here was: wheat, 56 acres; oats, 35 acres; barley, 50 acres; potatoes, 4 acres; gardens and turnips, 5 acres; total 150; being 11 acres more than last year. The results were: 450 bushels wheat, 600 bushels oats, 550 bushels barley, 500 bushels potatoes. No record of turnips or garden produce, but a good supply was stored away for winter. Hay stacked, 250 tons; new land broken, 10 acres; summer-fallowed, 12 acres; fall-ploughed, 100 acres. The herd numbered 65 head as against 54 previous year; 4 head were killed for beef. The band had also 10 pigs, and, in private stock, 16 horses, 3 cows, 3 steers, 9 calves and 20 pigs. There is a mower here and a wagon which have been ten years in use and both are still in good order, showing that good care is taken of implements. The houses were all visited; they are of a superior class. The only objection I had was that stable accommodation had not been increased in proportion to the increasing number of cattle.

Louis Calihoo was living in his new house and we stayed here over night, as both our horses and ourselves required a rest after ploughing through three or four feet of snow. The building is 18 x 22 with a lean-to kitchen 11 x 22, log, shingled roof, upstairs rooms, good flooring up and down, 12 foot ceiling, good doors and nicely furnished in every way, cook and box stoves, beds, tables, chairs, clock, altogether a comfortable place. A new granary 16 x 16, a new horse stable 22 x 26, old horse stable for 6 horses, cattle stable for cows and calves. The steers have to stay in the bluffs, but sheds will be provided this year. A splendid spring close to the stables. A shed for implements was also under way. The self-binder, private property, was not under cover. Makes butter and sells it in St. Albert, has 17 head of cattle, 23 hens, 3 ducks, 5 horses and 14 pigs. Had a good garden, harvested 120 bushels wheat, 19 of barley, 140 of oats, 60 of potatoes and 4 of turnips; was busy making and fixing sleighs, preparing for freighting for Hudson Bay Company to Athabaska Landing, paid $1.00 per 100 lbs.

A son and daughter had returned from High River Industrial School and one, I understood, was still there. I noticed that in the morning the boy and girl sat listening to the usual conversation going on in such places. I asked them if they had nothing to read? They replied that they had not. When pupils leave these institutions they should be supplied with some reading matter so as to keep them from forgetting what they had learned, as well as keep them employed during the long winter evenings. Chief Michel's house was in its usual good shape; has 19 head of cattle. His two sons, High River pupils, were working well. One is a carpenter, and was making good use of the tools given him. He makes doors, windows, sashes, and many other things for the other members of the band. The other boy attends to the cattle, farm, etc. One daughter returned from High River last summer and she helps her mother in the house-keeping.

We took our dinner here and this young lady cooked it for us and kindly washed our dishes, and I had pleasure in rewarding her for her kindness. The eldest daughter, Josephine, another old High River pupil, is now married and has a nice little house close to the reserve. The other houses here were equally as comfortable, and the impression one gets in passing through this reserve is that it resembles a well-to-do district in Ontario or Quebec. We now proceeded to

Alexander's Reserve, or Farm No. 17,

preceded by our Indian on horse-back to point out the way, and even he had occasionally to consider what direction to take. Mr. O'Donnel, farmer at Alexander's, was to have met us at Michel's; but he was unable to come, owing to the storm, and never expected that we would make a start until it was over. We proceeded next day to White Whale Lake, camping at Lac Ste. Anne's, leaving Alexander's Reserve to be inspected on our return.

Paul's Reserve, No. 133a,

White Whale Lake, was next inspected. A marked improvement could be noticed on this reserve. Five new houses, including one by Chief Paul, on the hill, a much healthier place than his old house, which was in a hollow. Fine new stables had also been put up. A small store-house had also been put up, where rations are issued, one portion is partitioned off as a room. We camped here for three nights. In going over this reserve we found the snow five feet deep in some places, and it was with difficulty we reached some of the houses. A new house had been built for the school teacher. The houses on the whole were in good order, being much tidier and cleaner than I ever found them, but there was room for further improvement. The stabling was also much better than the previous year. Houses were whitewashed and all had open chimneys but one, and the atmosphere in this one was anything but pleasant, and I told the man (Mr. John) that he should build a chimney for the sake of the health of his family, and it is likely he would do this. Paul's new house, as I have said, is on top of the hill; it has been well built, open chimney, whitewashed, one bedstead and one on floor; walls covered with pictures and the place was clean. Some good chairs were noticed, made by his son at the school, Mr. Blewett, the teacher, taking great pains in teaching the boys such work, as well as gardening. A good table in the school was noticed, made by the boys out of old packing cases given by Mr. Taylor, of the Hudson Bay Company, at the treaty payments. The table was painted and was really a good job. Paul has good stables, plenty of hay, and all his implements were stored away under lock and key. The ration-house I mentioned is 18 x 22, and a stable 12 x 16, both inclosed by a good fence. The mission building and school were in good order. Sunday services are held in the schools; we attended them. Mr. Luke, one of the band, preached, and several others, male and female, took part, about eighty persons were present, singing was good, and the whole services were interesting. The mission is conducted by the Methodist Church.

The crop put in on this reserve was: wheat, 5 acres; oats, 2; barley, 20; potatoes, 4; gardens and turnips, 8; total, 39 acres; being three acres less than last year. Results were: 80 bushels wheat, 30 of oats, 130 of barley and 690 of potatoes. Turnips and garden produce also, but no record.

Hay stacked	254	tons.
New land broken	23	acres.
New fencing	100	"
Fall-ploughing	30	"

The cattle were in good condition. The hay was choice and there was plenty of it, although it was difficult to haul owing to the deep snow. I noticed one man bringing hay packed on his horse. Some very good bob-sleighs and jumpers were noticed. These Indians are anxious to get along. The herd numbered 36 head. The number last year was 34. Some had been killed for beef and transferred to other bands. In private stock the band has 20 horses, 6 cows and 10 young cattle. Fish and rabbits were plentiful. The Indians were pleasant and cheerful and were glad to be called upon. The Rev. Mr. Somerset is the clergyman in charge.

Joseph's Reserve, No. 133,

was next inspected. This band, as I last reported, was in capital shape. The hunt had been good and was expected to keep so during the winter. Many of them had earned considerable, at the same time they had not been unmindful of work on the reserve. The houses were all well fixed up, and all had good stables, and the Indians themselves were well dressed and were cheerful. Most of the band were on the reserve at time of inspection, as they could not travel in the deep snow. The women were busy making snowshoes, and many of the men expected to leave in a few days on the hunt, leaving, of course, some at home to attend to the cattle. They were threshing the grain on the lake and fanning it in the old way by throwing it up and letting the wind blow away the chaff. Considerable waste was experienced in this way of doing the work. A small house here, occupied by one "Mary" had no wooden floor, the only one in the whole agency without a wooden floor, and I was shown boards to make a floor so soon as they could get nails. In some cases they put the floor down by boring holes with an auger, and using wooden pins. Nails being 25 cents a pound here, they have to use other devices in some instances, but they prefer the nails when they can get them. The crop put in was: wheat, 6 acres; barley, 15; potatoes, 3; gardens and turnips, 7; total, 31; being 4 acres less than last year. Results were: wheat, 7 bushels; barley, 150; potatoes, 500; no record of turnips and garden produce. Hay stacked, 200 tons; new land broken, 10 acres; new fencing, 50 acres; fall ploughing, 20 acres. The hay was of choice quality and a good deal of it was stacked near the stables. The herd numbered 38 head. Last year the number was 17. In private stock the band had 25 horses, 2 cows and 3 steers. These Indians are a nice lot, and I found them exceedingly pleasant and courteous. The reserve is a good one, and the Indians seem to have the right idea of making the best use of it, namely, hunting in winter, and taking care of their crops in summer, fixing up their houses and stables, getting hay for the cattle, &c. The houses were all clean and comfortable, and some of them were well furnished.

We now returned to

Farm 17, *Alexander's Reserve, No.* 134,

W. J. O'Donnell being farmer in charge, as well as of Joseph's and Paul's. The farm buildings were in their usual good condition, and were all whitewashed. A small house had been put up for Indians visiting the farm or when waiting for rations in cold or wet weather. A new hen-house and piggery under one roof had been put up. A porch and storm windows had been added to the farmhouse, and a good deal of new fencing made.

The implements were neatly stored away, and all articles in use were on hand, and everything was in good shape and in its proper place. One had not to wander over the whole reserve to find articles. The farmer received a new cookstove, and his old one was given to Chief Alexander, who was very proud of it. A good many of the Indians were absent on the hunt, but enough were left on the reserve to attend to the cattle. The houses were all whitewashed but one, and this one the man said he had no means of getting white mud for, as he had neither horses nor oxen, and the mud is obtained from 40 to 50 miles from the reserve. The houses were clean and comfortable.

Beaverfoot has a nice place; good large house, new stable and new shop; has 5 head of cattle, department control, and 11 head private cattle, 7 horses, 2 pigs, 14 very fine sheep, and 18 hens; makes chains, jumpers and bob-sleighs, hay racks, &c.

Butter is regularly made. Had a good garden, good fences and a plentiful supply of hay. Was going to put an upper floor in his house next summer; takes the best of care of his cattle, and they were looking well; has a nice place for the sheep. This is what may be called the model farm of the agency. There were many others equally as good, if not so extensive.

The chief's house was in good shape, had 11 head of cattle and 7 sheep, good stables, but not so clean as they should have been, but he was absent himself at McLeod Lake, hunting. There was plenty of hay, but cattle had to be driven over a mile for water. A number of the Indians make butter and the women as a rule are thrifty, many were making moccasins, bead-work, and a few were knitting. I noticed an improvement all over the reserve over last and previous years. The stabling is a good deal better; but as the herd increases, these Indians must have larger ideas of how cattle should be wintered. Larger and better stables in every way with good doors must be made to keep pace with the increasing herd. The crop put in was:—

Wheat	60 acres.
Oats	35 "
Barley	75 "
Potatoes	8 "
Gardens and turnips	16 "
Total	194 "

being 12 acres less than last year. Results were:—

Wheat	550 bushels.
Oats	400 "
Barley	760 "
Potatoes	1,200 "

Hay stacked, 600 tons; new land broken, 50 acres; summer-fallowed, 20 acres; new fencing, 500 acres; fall-ploughing, 200 acres. The brush plough having arrived late in the season, nothing was done with it. The fences were well made and were in good repair. Hay stacks were strongly fenced in, and the hay was of good quality all over the reserve. The cattle looked very well. The herd numbered 76. The number last year was 70. Some had been killed for beef, 31 sheep and 8 pigs, and in private stock the band has 40 horses, 5 cows and 14 young cattle. The usual inventory was taken and farm books checked, and all were found correct. Mr. O'Donnell is careful of the implements and other property in his charge and is hard working. The Indians were peaceful and contented. We now returned to the agency and found the roads much better returning than on coming.

The total crop put in in agency was:—

Wheat	177 acres.
Oats	119 "
Barley	230 "
Potatoes	25 "
Gardens and turnips	43 "
Total	594 "

Total harvested:—

Wheat	1,540 bushels.
Oats	1,530 "
Barley	2,150 "
Potatoes	3,490 "
Total	8,710 bushels.

besides turnips and garden produce, of which no record was kept.

Total new land broken	138 acres.
" summer-fallowed	67 "
" fall-ploughing	530 "
" fencing	800 "
" new houses built	13 "
" " stables	23 "
" hay stacked	1754 tons.

The gardens were well looked after, and each Indian was liberally supplied with plants by the agent from his hot beds.

Total number of live stock:—

Cattle.	Dept. Control.	Private.
Enoch	150	10
Michel	65	15
Alexander	76	19
Joseph	38	5
Paul	36	16
Agency	8	...
Farm 17	1	...
Total	374	65

Sheep	69
Horses	167
Pigs	47

The warehouse was neatly kept by Mr. Lake. The flour from Ogilvie Milling Company was choice and made capital bread and bannocks. The bacon from Lawry & Sons was also choice.

	Lbs.
Contractors supplied 37 head of cattle, yielding in beef	21,310
in offal	1,552
Indians supplied 25 head, yielding in beef	15,585
in offal	1,281
Consumed in 13 months	39,728

	Lbs.
Average weight of Contractors' cattle	576
offal	7·28 per cent.
Indian cattle averaged	623
offal	8·21 per cent.

The beef in all cases was of good quality and was well butchered.

The office work is well attended to by Mr. Lake and everything was in apple-pie order, books neatly and correctly kept and written up to date, and it was a pleasure to audit them. Mr. Lake is very useful in going to the reserve when required.

14—17

The births and deaths during the 12 months were as follows:—

	Births.	Deaths.
Enoch	4	5
Alexander	16	5
Michel	4	2
Joseph	7	6
Paul	7	4
Total	38	22
Total population		729

Gardening.

The growing of tobacco is an interesting feature in this agency. The agent raised about 200 lbs. and many of the Indians had more or less, grown in their own gardens, from seed supplied them by the agent. That tobacco can be successfully raised has been proved beyond a doubt, and there is no reason why a paying industry should not be made by cultivating on a larger scale. The secret of success is not so much in the growing as in the curing of the leaf. As I said in the beginning of this report, the agent had a garden which was the admiration of all visitors and at the exhibition held in Edmonton 13 first prizes were obtained and three second. One first prize was for the best variety, and the number exhibited by Mr. DeCazes was 83. Three cabbages weighed 128 lbs. The agent continues to give his undivided time and attention to his Indians, and I have pleasure in informing you that they are making steady but sure progress under Mr. DeCazes' intelligent and careful management.

The usual inventory was taken, which with detailed report and returns and statements were forwarded to the commissioner, Regina. The next place reached was

Hobbema Agency,

going there by rail and arriving at the agency on the 26th February.

Mr. D. L. Clink, agent.

Mr. C. J. Johnson, clerk.

Donald Whitford, interpreter.

Gilbert Whitford, interpreter, and in charge of Sampson's cattle ranch.

Flamont, interpreter and attending the men getting out logs.

A. E. Moore, farmer, and in charge of Ermineskin's and Louis Bull's Reserve.

Vital LaRocque, interpreter and labourer.

The agency buildings were in good order and had been newly whitewashed. The stables had been plastered, also the ration-house. The clerk's house had been willowed and plastered and whitewashed. A good porch, 6 x 8, had been put on and a water-closet added since last inspection, also storm sashes; and the house was much more comfortable than formerly. There was no garden at the agency.

Louis Bull's Reserve, No. 140,

under charge of Mr. Moore, was first visited. The stables at Bear's Lake, built by Mr. Ross, were inspected and the cattle counted. The stables were in good order, being cleanly kept. A small house for the men in charge was also in good order, it had a wooden floor and was comfortable. Two men are constantly here to feed and water the cattle. The herd looked very well, a few of the oxen were old and would be turned into beef in the summer, when fat, as there were young oxen broken in to take their place. Water was close at hand and the cattle could drink at any time. Separate compartments for calves, and for cows calving. The whole place was in

good shape and showed that the Indians were doing their work faithfully and well. Mr. Moore, farmer, resides, during winter, about a mile distant, and supervises both places. I found the houses in better shape this year than last, they were cleaner, and implements were better cared for. The chief has a good house and it was whitewashed outside but not inside. Two bedsteads. The implement shed reported last year without a roof had a covering with poles, straw and earth. The stables were only used for the work oxen and ponies, the other cattle being at the ranch. The house was fairly clean, but might have been better.

Paul Bull has a nice clean house and it was whitewashed outside and in, outside with blue-tinged mud and inside with lime. Good stables, some good ox yokes were noticed here, also bob-sleighs, jumpers, hay frames, fork and axe handles.

Francis: good, clean house, whitewashed outside and in, good floor; house well furnished. Ploughs not under cover, but the man promised to have this done. I told him there would be no use in asking for implements if they did not take care of those they had; that the taxpayers could not afford to furnish ploughs and have them rot in the snow and rain. The man said he generally kept them under cover, but required the room for other things.

"Old Pagan," an old woman, lives alone in a small house not whitewashed and not clean, and a lot of rubbish lying around was to be cleaned up at once. This work is generally done coming on spring. These are samples of the houses here.

The crop put in on this reserve was:—

	Acres.
Wheat	45
Barley	17
Oats	12
Turnips	1
Potatoes	1
Gardens	1
Total	77

being four acres less than last year. The estimated results were, the threshing not having been completed:—

	Bushels.
Wheat	450
Barley	170
Oats	144
Turnips	150
Potatoes	200

This was equal to 10 bushels to the acre for wheat and barley, and 12 for oats. Hay stacked, 175 tons; this was equal to one and three-quarter tons per head of cattle, and would not suffice without the straw. It is a mistake to sail too close in the matter of hay, as it is often a reason for keeping cattle out too long before feeding on hay. Cattle thus run down and it is hard to bring them into condition again. Forty acres of fall-ploughing had been done; no new breaking nor any summer fallowing; one new house and three new stables built. The garden produce was consumed during the season. The herd numbered 103 head as against 95 previous year; 10 head having been killed for beef. The cattle are held by nine families. In private stock the band has 20 ponies and one young beast. The cattle were branded and entered in register book, a separate account being kept for each holder. Mr. Moore was doing very well in looking after the cattle of both Ermineskin and Louis Bull's herds, as up to the time of inspection not one death had taken place. A number of the Indians were getting out logs for the proposed new mill. Next reserve inspected was

also under charge of Mr. Moore, the cattle ranches being first visited. The old stables at Bear's Lake, built by Mr. Ross, were being used this winter for the older cattle, hay and water being easily obtained. The cattle were in good shape; in fact, the best of the three herds. A few of the old oxen will be turned into beef, and there were some fine specimens of young oxen nearly broken in for spring work. A new stable had been built about a mile from the old one, where the calves were wintering, also a few cows. This will be a good stable; it is 100 x 60, and will be all covered when completed. In the meantime four compartments, each 20 x 20, and three sheds, one 60 x 60 and two 20 x 20, are covered in, affording splendid shelter for the calves. When completed, there will be room for 250 or 300 head of cattle. Stanchions will be provided for the cows. The stable is strongly built—good square logs, and well put together, dove-tailed corners being well done. The only fault I noticed was that the roof was altogether too low. The whole reflected credit on Mr. Moore, who did the work, assisted by the Indians. A fine lot of calves were here. Hay was stacked about half a mile from the stables, and water could be had about a quarter of a mile distant. There was a neat little house for Mr. Moore and one for the Indians in charge. Five Indians and their families were in charge of the three stables, under Mr. Moore. The houses on the reserve were all visited, and, on the whole, were found in good order. I can only refer to one or two as samples:—

Sam Baptiste has a good house, with porch, clean and comfortable; children also clean and well dressed. Has open chimney and a tin stove. Has tables, beds, chairs, etc. Makes bob-sleighs; would make butter, but has no churn. Has 16 head of private cattle; good stables.

Lazy Joe has a good house, whitewashed outside and inside, two bedsteads, pictures on walls, and all was clean. Walls of house raised three logs since I was here last. Makes bob-sleighs, ox yokes and other articles. Has a small stable, but cattle at ranch.

"Bobtail" has an old house, not whitewashed, and it was dirty; was going to build a new house.

Arthur has a small shack, not whitewashed and not clean; beds on floor. One of the poorest places I had seen on my trip.

Stony Paul has a new house, shingled roof, upper floor and beams planed, good floors and doors, whitewashed inside and lime on hand to do outside; no open fireplace, and I advised him to put in a chimney. House heated with a syndicate stove loaned him by the farmer.

The mission buildings, Roman Catholic, were examined. A new church had been built since last inspection. It is 36 x 24, with chancel 18 x 12; three windows on each side, one in rear end and two in front below and a double window above, to give light to the choir gallery. It is a neat and well built building; a small tower with bell; painted inside but not outside. A new building for a boarding school was to be put up this summer.

Three sisters are in charge, one of them being the teacher, and the school had improved since the sisters came, the attendance being also much better.

Joe Ward has a good house. Some good chairs made by himself were noticed. I asked him to send a sample to the fair in Regina. House was well furnished with beds, tables, cupboards, dishes, brooms, washstands, &c. Whitewashed outside and in; tidy, thrifty-looking place. Has a good stable, but cattle at ranch; implements well cared for.

"Crane": only a small shack, put up last fall, it had no floor; the only one I found without a wooden floor, but it was said the place was only a temporary one, as a better house would be built.

Chief Ermineskin's house was in its usual good shape, being clean and tidy in every respect; walls decorated with pictures, brackets, &c. The chief was very friendly, and said what he had to say in a gentlemanly manner, all of which I reported at the time.

The crop put in on this reserve was: wheat, 147 acres; barley, 40 acres; oats, 19 acres; turnips, 3 acres; potatoes, 4 acres; gardens, 1 acre; total, 214 acres; being

18 acres more than last year. Threshing had not been done, and therefore results were only estimated, which are, as a rule, unreliable; the estimate is based on an average of ten bushels to the acre, and from what I noticed, I was of the opinion that the average would not be ten bushels; the sample was poor and half of it was weed seeds and would require a lot of cleaning. However, this is the estimate: wheat, 1,470 bushels; barley, 400 bushels; oats, 228 bushels; turnips, 500 bushels; potatoes, 600 bushels. Hay stacked, 280 tons, for 218 head of cattle; being about one and a quarter tons per head, whereas three tons is the required quantity agents are told to put up. There would be the straw, which would help, but it was running a big risk in having so little hay. New land broken, 45 acres; summer-fallowed, 25 acres; new fencing, 40 acres; fall-ploughing, 100 acres.

Seven new houses and about as many stables had been built. The cattle were, as I have said, in good condition. The herd numbered 184 head, as against 141 in previous year; a number had been killed for beef. In private stock the band had 40 ponies and 34 head of cattle. The 184 are held by 28 heads of families.

The farm books were examined and an inventory taken of property in hands of farmer, all of which I found in better shape than at last inspection. The farm house was in excellent order: inside had been papered and painted at Mr. Moore's own expense, and Mrs. Moore keeps the house very neatly, and it must have a good effect on Indians visiting the place to notice what a little good taste in housekeeping can do. The house is closed during winter, as Mr. and Mrs. Moore live during the winter months at the cattle ranches. Mr. Moore is active, is thoroughly reliable and is doing his work well.

Sampson's Reserve, No. 138,

was the last inspected, the cattle ranch being the first place visited. The stables here are the same as I have described in former reports. They were getting somewhat dilapidated and would soon require a lot of fixing up and enlarging, but it was proposed to build new stables at another point and divide the herd into two bands. The old stables had been thoroughly cleaned out during the past summer, and the road scraper was used for the purpose. There were 30 stanchions in the cow stable. There was a compartment specially for calves. Water was easily obtained in the creek running close by. The hay was of better quality than last year. Only half of the herd was at the stables, the other half being on the reserve feeding on the straw stacks. Those at the stables were the poorest lot in the agency. Some of them were very thin. The stronger cattle were sent to the straw stacks. The calves were a fair lot. Some of them were very small, being late calves. The houses for the men in charge were an improvement over what they were last inspection. I visited all the houses on the reserve, and noticed an improvement generally. I can only notice a few here. Chief's house was in good order, as it always is. He helps all he can, he said, to get hay put up.

George Red-deer: small house, whitewashed inside, but not outside; rubbish all around was to be cleaned up; two bedsteads and one bed on floor; a sick man here; children ragged and dirty; the sick man's name was Peter Kahow. Some clothing was promised to be sent to these people.

Snake Skin: small house, whitewashed inside, but not outside; three very old people here and poorly dressed; have some private cattle, poor stable.

Susie: new house; tongued and grooved floor; poles peeled of the bark for roof and sods; expects to have shingles put on next year; place clean and comfortable; old house used to store implements.

Joshua: a double house; cook-stove; house whitewashed; children not as clean as they should be.

Joe Sampson, chief's son, has a nice, clean house. I never found it otherwise; good stabling, a new one built during the year; ploughs covered with pieces of an old teepee. Most of the Indians had a good deal to say about the mill and their flour, which I reported to the commissioner.

The crop put in here was as follows:—

	Acres.
Wheat	179¾
Barley	59¼
Oats	11
Carrots	1
Turnips	5
Potatoes	8
Garden	2
Total	266

being 22 acres more than last year. Results estimated, threshing not having been completed, and I doubt if the estimate, although a low one, would be realized, from what I noticed of that already threshed:—

	Bushels.
Wheat	1,798
Barley	490
Oats	76
Turnips	800
Potatoes	1,000

Hay stacked, 450 tons for 276 head of cattle, equal to a little over 1½ tons per head. The straw would of course help; otherwise there would be a scarcity of feed, and more especially if the winter would be a long and severe one. New lands broken, 44 acres; summer-fallowed, 15 acres; new fencing, 42 acres; fall-ploughing, 125 acres. Four new houses and six new stables had been built. The herd numbered 245 head, against 216 last year, about 20 head having been killed for beef. In private stock the band has 31 head of cattle and 100 ponies. The 245 head are held by 49 families. The total crop (estimated chiefly):—

	Bushels.
Sampson, wheat	1,798
barley	590
Ermineskin, wheat	1,470
barley	400
Louis Bull, wheat	450
barley	170
Total	4,878
Total oats	448
Total turnips	1,450
Total potatoes	1,800
Grand total	8,576

The warehouse had been well attended to by Mr. Johnson. The bacon from Lawry & Sons, of Hamilton, Ont., was of choice quality. The office work was also well done by Mr. Johnson. The only difficulty was that he had so many outside duties to attend to that office work proper would probably get behind. I cautioned him on this, however. The cattle killed for beef from 1st February, 1894, to 28th February, 1895, was 57, yielding 36,781 lbs. of beef, 3,246 lbs. of offal, making a total of 40,027 lbs. consumed in 13 months, less what was in store 28th February, 1895, 2,672 lbs. This number consisted of seven oxen, 5,226 lbs., or equal to 747 lbs. each;

30 steers, 20,687 lbs., or equal to 689½ lbs. each; 20 cows, 10,868 lbs.; or equal to 543½ lbs. each. The offal on the lot was 8·82 per cent.

Fifty-seven hides were issued to the Indians and the record of them kept. The cattle statement is as follows: Sampson's herd, 245; Ermineskin herd, 184; Louis Bull, 103; Agency, 67; private cattle, 66; calves dropped since round up and counted at inventory taken 4th and 5th March, 1895, 30; total, 695. The inventory taken on 4th and 5th March was as follows: bulls, 7; oxen, 105; cows, 178; steers, 109; heifers, 139; bull calves, 64; heifer calves, 62; private stock, Baptiste, 15; total, 679, discrepancy since last inspection, 16. The other private cattle, besides Baptiste's, are included in the above inventory. Baptiste keeps his cattle in his own stables.

The mill was in the same condition as it was last year, with some alterations to the machinery, and the flume had been removed from the south to the north side of the mill and a new frame made. An Indian named Pierre was the miller at the time. Owing to shallow water the mill was grinding about a bag and a half a day. The strong bank of the dam had been raised from 9 to 10 feet. The frame of the flume is strong and solid, being made by a practical mechanic. Five pails of water were in the building to be used in case of fire. There was a piggery, it is in the face of the river bank near the mill; it is 30 feet square, and roof made with rails and sods. Some good specimens of Berkshire, Improved York and Poland China were to be seen. The old interpreter's house was used as a blacksmith shop, and one end is used for taking meals by the men working at the mill. The private earnings of the band during the year were $4,760.00

There was wheat enough raised to furnish all the flour required for the three bands, and a good deal left over for next year, all of which was ground at the mill, and about 500 bushels wheat taken as toll for gristing done for the settlers. The Indians were allowed to sell some flour, also bran, proceeds of which they invested in tea, tobacco and clothing. A full statement of the working operations of the mill since the commencement, was made out and forwarded to the commissioner.

The school-houses had been plastered and whitewashed and otherwise fixed up during the year, and more care had been taken to have them supplied with wood.

The little graveyard which had been allowed to fall into ruins had been fenced in.

The fences on the whole were in fair order. It was noticed the Indians use some of these as firewood in winter and put fresh rails on in the spring.

The population, births and deaths were as follows:—

——	Population.	Births.	Deaths.
Sampson	269	15	16
Ermineskin	167	14	6
Louis Bull	54	4	6
Sharphead	2	.....	.....
	492	33	22

The health of the Indians at the time was fairly good. The agency, as a whole, was in fair shape.

Detailed report, inventory and statements were forwarded in the usual way.

Red Deer Industrial School

was next reached, arriving there on 15th March.

Rev. John Nelson, principal.

James Skinner, teacher.

Mrs. Nelson, matron.

Mrs. Matheson, assistant matron.
S. Lougheed, carpenter (left Battleford on the 24th March).
Robert McLelland, farmer.
Miss Buehler, seamstress.
Miss Rodgers, cook.

A good many improvements and repairs had been made during the year, and the place was in very good shape.

I fully described the buildings in my last report and will only now describe my tour over and through the various buildings, noting any changes since I was here last. The first building was the one occupied by the carpenter and farmer; a partition had been put in here in order to divide one side from the other. This building was in good repair. Carpenter shop was in good shape, a neat little building. Tools were all nicely placed. Four boys were learning this trade. Geo. McLean, John Monias, Jos. Jackson, Lazarus Wilson or Shirt. The boys, besides doing many repairs, made window frames, doors, picture frames, repairs to laundry, made porch for main building, shelving, boxes for clothing and for groceries, and many other little jobs about the buildings. The upper part of the carpenter shop is reached by an outside stair, and is used for storing dry-goods and it was a tidy place, all goods being folded and carefully placed.

The blacksmith shop is used for storing implements, there being no blacksmith as yet. The best of care was taken of implements. The piggery was next reached; although bearing this name it has never been used for the purpose of keeping pigs in. The flour and beef are stored here, under good strong door and lock. The horse and cattle stable was in good order, room for 4 horses and 14 cows, large hay loft, compartment at one end for calves, harness room off the horse portion. On the south side there is a lean-to to the main stable, giving stall room for the working oxen and 12 other cattle, and another compartment for calves, and on the north side there is a shed large enough to hold all the cattle. There is a very good corral, 120 x 120, about 7 to 8 feet high, 11 rails in each panel, and strong posts, a substantial piece of work. All these improvements were made by the boys. Root-house had been enlarged and was in good order and the turnips and potatoes seemed to have kept well. Boys' outside water-closets were in good order. The laundry and bakery were next reached. Upstairs was to be the drying room. The oven had been removed to the rear end of the building. The best of bread was made. The ice-house kept ice very well the past summer. The hennery was a neat clean place. The girls' outside closets are on the west side of the main building, in one corner of the play ground, which is inclosed by a board fence. The size of the play-ground is about one acre.

The main building was gone over; a good porch had been put on at the entrance to the basement, which is an improvement. The wood is now put through a chute in one of the small windows, saving the trouble of carrying it round by the doors. The floor had been newly cemented, and was in good condition. The brick tank had been taken down and a wooden one put in its place. Boys' bath-room was clean. The water-closets in the basement are not used in summer. The sink had been fixed and was working well. The office is somewhat small. The sick-room was used as a bed-room. The sewing-room had two machines. All the girls except two small ones are learning to sew and to make their own dresses. One girl, Clara Nee-nee-kut-a-wap, made two shirts for the teacher after hours, and earned 75 cents. This girl also took first prize for hand sewing at Red Deer fair, can cut and fit dresses herself. Bella Sinclair took first prize for socks, and Ida Baldhead got third prize for bread in competition with white people. Emily Stanley got second prize for hand sewing. Miss Buehler was doing her work well, and the girls looked neat in good fitting dresses, instead of the unshapely garments one so often sees in public institutions. A dress will wear just as long to be a fitting one, and it gives these girls a better idea of neatness, not only in dress, but in all they do. The closets for clothing were in good shape.

The dining-room looked very pretty; it was decorated with evergreens, flags, mottoes and pictures, and was in perfect order; six tables for pupils, and these had

been covered with zinc. The kitchen was also clean and neat; a new range was working well. The tables here were also covered with zinc. All the girls take a share in kitchen work. The supplies were kept in a small store-room off the kitchen in boxes and bins made by the boys. Miss Rodgers was doing the work of the kitchen in a satisfactory manner, an important part in an institution of this kind. Girls' bath-room was a comfortable place and it had a stove, looking glass, towels, etc.

The room of the assistant matron and seamstress was a model of neatness.

The girls' dormitory looked very well. The scarlet counterpanes gave a finish to the beds, and the room was the pink of cleanliness and neatness, reflecting credit on Mrs. Matheson, who has the dormitories in charge, and also on the girls themselves for having such good taste in keeping their room so nicely. The walls were covered with pictures, mottoes and photographs. There were seventeen iron bedsteads; each bed had a palliasse, two sheets, two blankets, three in winter, counterpane, pillow and pillow sham; two night dresses for each girl. Some of the pillows were feather, which the girls brought with them from home. The floor was painted, and altogether there was no neater or more cheerful room to be seen anywhere.

The boys' dormitory had eighteen beds, furnished same as the girls; the room was also profusely decorated with pictures, Christmas cards, mottoes, and looked cheerful and bright. Each boy had two night shirts. Teacher's room is at one end of this dormitory.

The school-room was in good order and the ventilation was also satisfactory. The attic contained the large tank which contains water.

The crop put in was:—

Oats	9¼	acres.
Barley	9	"
Potatoes	3⅞	"
Turnips	2½	"
Onions, carrots and beets	⅝	"
Mangolds	¾	"
Total	26	"

which is the total land broken. There were harvested 110 bushels of oats, 55 of barley, 365 of potatoes, 794 of turnips and 6 of onions, carrots and beets; hay cut and stacked 85 loads or equal to 65 tons. The quality of the hay was good, but there would be barely enough for feed till the grass got good, although the cattle were then picking up feed on bare places. Most of the land had been fall-ploughed. Fifty acres of new fencing had been made and 8,000 rails had been cut by the boys. The cattle consisted of:—

Oxen	5
Cows	20
Steers	4
Heifers	6
Bull calves	8
Heifer calves	11
Total	54

an increase of 20 over last year. There were 27 hens and one pig. Six or seven of the cows were giving milk. A few of the cows and the oxen were in poor condition and would require careful handling. The other cattle were in good order. The time-table was the same as last year. The meals were well served and I noticed the pupils were well behaved at the tables. The work of the school was going on in a satisfactory manner. I noticed quite an improvement in the way of speaking English. The youngest pupils will speak freely. A debate took place one evening

six boys and girls on each side. The debate was "Resolved that reserve schools are better than industrial schools." Each boy and girl spoke and argued their side of the question with considerable ability, some made very good points, which were original and amusing. Such meetings do good, they fill up a long winter evening, besides being good practice in speaking English. One of the older boys is generally chairman and presides with all the dignity becoming the position. The number of pupils in the institution was 36, (boys 20, girls 16). The health of the pupils was good. The doctor had made few visits, one sick boy, son of Jacob of Morley, was about being sent home. I notice that a good supply of Bibles and hymn books had been sent in during the year.

The accounts were carefully audited and each account balanced, after writing off worn out articles.

The principal had his accounts in good shape. The utmost economy had been observed, and Rev. Mr. and Mrs. Nelson were deserving of praise for the excellent care taken of things generally, and especially of the welfare of the pupils, who all seemed happy and contented, and the progress made was in every way satisfactory.

Full statements, with detailed report, were furnished in the usual way.

My next point was

St. Joseph's Industrial School,

arriving there on 1st April.

Rev. Father Naessens, principal.
C. Dennehy, assistant principal.
W. Scullen, teacher.
Scott Magee, carpenter.
Thomas Markins, farmer.
Edward Vanloo, baker.
George Woods, shoemaker.
Sister Matchoelosse, matron.
Sister Legoff, assistant matron.
Sister Kelly, teacher.
Sister Mongrain, teacher.
Sister Mathurin, seamstress.
Sister Leblanc, cook.
Sister Maria, assistant cook.
Rev. Father Davis assists the principal, but receives no salary.

A good many improvements had been made since last inspection, in the way of beautifying the grounds around the buildings, such as new fencing, gravel walks, &c. In going over the buildings the first place reached was the hen-house, a comfortable place, and kept in good order. Root-house had been improved, a new roof had been put on, and the space enlarged, and walls cased in with boards; it kept the roots in good form during the winter. Pig pen was also in good condition. The granary (old bakery) was clean, and the grain was nicely stored in bins and bags. The horse stable was in its usual good shape, harness-room, &c. In rear of this stable is a shed for cows calving, and a stall, or loose box, for the bull, a very superior short-horn. There is also a large corral with a high board fence around, and a covered shed at one side, affording good shelter for the cattle, and in one corner is a small building and separate inclosure for the calves. The cow stable is next to the horse stable, and has ten stalls. The upper part of the horse stable is used for storing seed grain, bran and other articles. There is also a large hay corral. The new implement shed is 120 x 22, shingled roof, with sliding doors, four compartments, one for driving rigs and sleighs; one for small tools, one for double wagons and bob-sleighs, two very good pair of the latter made at the school were noticed; they were ironed by the boys. A fourth compartment was for large implements, such as mowers, rakes, ploughs, seeders, harvesters, fanning-mill, &c. This shed had not yet been painted; a new fence had been put on both sides of the avenue leading to the stables, 350 yards of picketing fencing having been put up,

which added much to the appearance of the place, besides keeping the cattle from roaming about. This fence was made out of waste lumber. A new coal shed, 33 x 14, had also been built, board roof, wooden floor. The boys' water-closets were in good order. The men's quarters were also in good shape. A shed for lumber, paint, nails, &c.

The carpenter shop is a neat place and is well lighted. Six boys are learning this trade, working alternately forenoon and afternoon. Their names are Alex. Steven, Jas. Royal, (at the time working at his trade at the McHugh ranch) S. Calihoo, L. Johnson, T. P. Wadsworth and G. Osiekyas. They did much of the work at the new buildings, fencing, made doors, windows, cupboards and many repairs. Shoemaker's shop is over the carpenter shop, entrance from outside. Ten boys are following this trade, their names are: L. Dennehy, Ben Calihoo, Wm. McGirr, Robt. Begg, Edgar Dewdney, Edward Arcand, Marcus Johnson, Ed. Beauchamp, Jack McHugh and Henry Stain. These were making capital progress and some of them were expert tradesmen and would have no difficulty in earning a living at the trade. Wm. McGirr, a Blackfoot boy, is a particularly clever lad and a good worker, and so were two others. The bakery was in good order and was clean, the best of bread was made. One boy, Willie Konan, was learning this business and was doing very well, he had been six months at it. This is the boy that plays the big drum in the band. The infirmary is now used as a dormitory and has 14 beds in it. The laundry was in good condition. The fixed-in tubs had been lined with zinc since last inspection. There were two boilers, washing machines, home-made and very good ones, mangles and stoves. The old store-house is still used for storing dry-goods, groceries, etc.

The new building for boys was now reached. The play-ground in front has swings and is neatly inclosed by a picket fence. Trees are to be planted and there is a flower garden inside of the fence. In the centre is a flag-staff put up since I arrived, and a large 16-foot flag proudly waves on Sunday and other extra occasions. I described this building in my last, suffice to say now that it was in the best of order from basement to attic. Sashes and double windows have been added during the year. The boys' dormitory was looking very well, the scarlet counterpanes and white pillow cases making a pretty contrast; 74 iron beds, each bed had a palliase filled with hay, 2 sheets, 4 blankets in winter, 3 in spring and fall and 2 in summer, pillow, counterpane, night shirts, one in summer. One end of the dormitory is Rev. Father Davis's room, where he can keep a watchful eye on the boys. On one side is the lavatory with 15 water basins fixed in, and two baths, and a water-closet. The school-room is a fine large, airy place. The band practices nearly every night, more or less, here.

The girls' building was found in its usual good condition. There is the reception-room and bed-room for visitors. In the reception-room there is a large glass cupboard, in which the medicines are placed. These are nicely arranged and bottles distinctly labelled. The other side of the hall (old school-room) is the church. This place had been extended ten feet and new flooring put on half of it; the other half was to be done later on. The dining-room had been enlarged by taking in the old kitchen and two pantries, and it is now a spacious and convenient room. There were eight large tables covered with zinc, another table for employees and one for the staff. The feature of the building, however, was the new kitchen. Sister Superior Christine, who had been transferred to St. Albert, drove all the way to Stony Plain, when I was there, to thank me for helping to get this improvement. There are four new pantries off the new kitchen, all fitted up with shelving and bins for holding groceries and provisions. The Chicago loom was in one corner. The range is on a brick foundation in the centre of the kitchen and works well. The cooking was well done. The whole arrangements were convenient and well adapted in every way to do the work required to be done. On the second floor is the girls' dormitory—31 iron beds, furnished the same as the boys'; an exceedingly pretty room. Bath-room with 13 fixed-in basins and bath, and a water-closet. There is a recreation-room where the old store-room used to be, including a small bed-room. There was a harmonium in the room, and the girls were making good use of it. The class-room was rather small. A room at furthest end is used as an infirmary for the girls

Another room, for holding linen, used as a sewing-room at present. The third flat contains Sisters' bed-rooms. The sewing-room I recommended last year was about being completed. Skylights had been put in and it is now one of the brightest rooms in the building. It is 34 x 24 and will be a capital sewing room, easily heated and good ventilation. All the sewing, knitting and mending will be done here. Fire grenades were all through the building, also fire buckets, and there are two fire escapes—one on each side of the building. All the rooms in both buildings were faultlessly clean, and everything was going with regularity and system.

The pupils are polite and well behaved and speak English very well, except the new arrivals, who of course take some time before they will venture to speak except in their own language. The crop put in on the farm was: wheat, 10 acres; oats, 55; rye, 17; potatoes, 6; turnips, 1; roots and vegetables, 3; oats for green feed, 2; total, 94 acres, being 14 acres less than the previous year. The crop harvested was: 50 bushels wheat, 843 bushels oats, 40 bushels rye, and 4 loads cut green for feed, 350 bushels potatoes, 160 bushels of turnips, produce of garden consumed during the season, 4 loads green feed from the 2 acres oats; 400 yards of old fencing repaired; hay cut, 30 tons, but all this was burnt by a prairie fire, and hay had to be purchased to feed the cattle. The herd was: bull, 1; cows, 22; steers, 10; heifers, 4; bull calves, 15; heifers, 6; total, 58. The number last year was 46. There were 14 horses, mares and colts; 114 hens, and 2 pigs; 5,944 lbs. beef had been received from animals killed during the year and 1,291 lbs. pork.

The books were checked since last inspection, item by item, and I found Mr. Donnehy very careful and accurate in the office work. Each account was balanced after writing off the condemned and worn out goods.

The band, under the efficient training of Mr. Scollen, had made good progress during the year, and I told them to practice well, as they would likely have a trip to Regina during the fair. The carpenter, Mr. Magee, is a good man for the position, so were the farmer, shoemaker and baker. They were all doing their work faithfully. The deaths during the year were four,—three boys and one girl. Sixty-five persons had entered their names on the visitors' book since last inspection, and some of them made very complimentary remarks. Total number of pupils, 120. The reverend principal and reverend sisters were sparing no efforts for the advancement of the pupils under their charge, and I have pleasure in reporting that I have noticed a marked improvement each year I visit here, and this was my ninth inspection of the schools; so that I can call to mind the day of small things with the present well equipped and well attended school. The boys and girls gave an entertainment during my stay, and it was quite a success. The girls sang several pieces with great taste. Some of them had fine voices and they seemed to have been well trained. The feature of the evening, however, was the club-swinging and dumb bells. The boys did splendidly and went through the performances with precision. The pupils were well dressed. They all seemed happy and contented. Detailed report with statements and inventories and returns were sent to the commissioner, Regina. I now proceeded to the

Sarcee Agency

and commenced my inspection there on 22nd April.

Mr. S. B. Lucas, agent;
Mr. A. Kemeys-Tynte, clerk;
Mr. George Hodgson, farmer, issuer and interpreter;
"Old Tom," assistant issuer.

The agency and farm buildings were in good repair and the place was clean all around. Some new picket fencing had been made around the buildings. The warehouse had been improved by the addition of an upper floor. Buildings had all been whitewashed. A large pasture for agency horses had been fenced in, bordering on the creek. The crop put in by Indians, 1894, was: wheat, 24¼ acres; oats, 2$\frac{3}{10}$; barley, 27$\frac{3}{10}$; potatoes 1¼; turnips and carrots, one-half acre each. Results:—80 bushels wheat, 75 of turnips and 19 of carrots. Home farm had 26 acres in crop,

and the results were: 10 bushels wheat, 120 of oats, 57 of potatoes, 250 of turnips, and 20 of carrots. New land broken, 31 acres; summer-fallowed, 68 acres; fall ploughing, 8 acres; new fencing, 56 acres; hay put up for home farm, 60 tons, and for the band for sale, 120 tons. The cattle under charge of the agent were in good order, excepting the oxen, and these were very poor. The live stock was:—

Horses and mares	8
Colts	2
Bull	1
Oxen	16
Cows	7
Steers	9
Heifers	8
Calves	4
Total	55

and 11 pigs. The number of cattle in hands of Indians was 10, held by four of the band. This was a beginning, and in private stock the band had 200 ponies. The beef supplied had been of good quality during the year, and the rationing carefully done. The crop for 1895 will be principally on the high land or bench. There were some pretty fields, and well fenced. The Indians were all living in lodges near the fields. Some were ploughing, others harrowing, and the farmer was putting the seed in with a seeder. The land appeared to be well prepared, and with reasonable moisture there was every appearance of a good yield. The crop putting in in 1895 would be 40 acres wheat, 30 of oats, 120 of barley, 4 of potatoes, and gardens 4 acres. This would include Indian and home farm. Four new houses had been built during the year, and logs were on hand for others. I found the places in better shape than at any former inspection, as regards cleanliness of houses and surroundings; but I cannot say that I noticed any difference in the tidiness of the women. The men are more particular about their personal appearance than the women. In driving up to the timber limits more logs were noticed, cut and dressed for houses and stables. The houses at the upper village were also vacant, and the Indians camped with the others at the lower village. Two or three small fields had been broken at the upper village. There is abundance of the finest land all along the bench, and with good cultivation good crops should be the rule, and there are splendid hay meadows at the upper end or second township, and the Calgary irrigation ditch runs through it, so that with irrigation any quantity of hay could always be depended upon, and thus a secure source of profit to these Indians, as there was always a market for hay in Calgary. The Indians supplied the police last year with 60 tons (part of 120 tons put up) delivered at the barracks, for $12 a ton, yielding $718.45. The flour and bacon were of choice quality.

The births and deaths were:—births—males, 3; females, 7; total, 10. Deaths —males, 7; females, 6; total, 13. The population is 234. Private earnings of the band, including proceeds of hay contract, $1,793.

The warehouse was kept in good order, and the office work was well attended to by Mr. Kemeys-Tynte, who is painstaking and careful. The agent was doing his best to keep the Indians at work and was meeting with fair success.

This is a splendid reserve—best of land, abundance of hay, water and timber, and near a market for all they can produce. There is no reason why they should not be well off and soon become independent of government assistance.

The health of the Indians at the time was good. More difficulty than usual had been experienced in preventing Indians from getting liquor.

The St. Barnabas Home was found in good condition. A new school building had been built during the year—40 x 20, frame, sheeted inside with dressed lumber, double floor and tar paper, and shingled roof, three doors, two porches and nine windows, ceiling 13 feet. It had not been painted. The mission building had a dormitory for girls—10 iron beds, comfortably furnished. The girls' dining-room is

also in this building. The boys' building was in good shape. There was an oven put up at the private expense of the principal, at a cost $80, but it proved of no use. The dormitory, bed-rooms, dining-room, teachers' rooms and lavatory and kitchen were all in a cleanly state. The dormitory contained 16 iron beds, in place of the old wooden ones formerly in use. Each bed had a mattress, palliasse, two sheets, one blanket, one quilt (three in winter), one pillow. The bread made by the girls was very good.

Rev. Mr. Stocken is principal; S. J. Stocken, manager; P. E. Stocken, teacher; Mrs. Canning, matron; Miss Dunlop, assistant matron. There were 27 pupils in the school—17 boys and 10 girls. The pupils were comfortably and neatly dressed, especially the girls. The boys were not so well dressed and some of them were ragged, which should not be the case in a place like this; but I was told that new clothes were then being made for the boys. Particulars of the work will appear in school report, but I may say here that I noticed considerable progress and that good faithful work was being done, and the fullest justice to the pupils was rendered by the entire staff. The pupils were polite and well behaved, and some of them were bright and intelligent. Fifteen pupils received the grant of $72 a year, and 12 the tuition grant only, namely, $12 a year; also, beef and flour, as rations for the latter. The school was in a prosperous condition. Statements, with detailed reports, were sent to the commissioner, Regina.

I now returned to Calgary and took the train for McLeod, arriving, on 2nd May, at

The Blood Agency.

Mr. James Wilson, agent.
Mr. C. N. Sanders, clerk.
Dave Mills, interpreter.
E. McNeill, farmer at upper reserve.
C. H. Clarke, farmer at upper end of Bull Horn's village.
A. E. Jones, farmer at lower end of the reserve.
Heavy Head (an Indian), mail carrier.
F. X. Girard, M.D., medical attendant.

The agency buildings are in the best possible order, having been painted and whitewashed since last inspection. A new porch had been put on the clerk's house and a small summer kitchen added, and some plastering had been done to the house, and also the issuer's house. I spent nine days, accompanied by the agent and interpreter, in visiting the houses and fields and cattle from the farthest point at the lower end to the farthest point up the river, the upper houses and fields being about twelve miles above the Cochrane ranch. I visited over 200 houses, and with very few exceptions, found them clean and comfortable, and the surroundings thoroughly cleaned up in every case. The fields looked well, and fencing was good and not a crooked one could be noticed. The Indians were all busy, some ploughing, some harrowing and others building houses and stables, and putting up fences and corrals, and I found everything most satisfactory, showing signs of progress and advancement all over the agency. The crop put in, 1894, was: wheat, 6¾ acres; oats, 211¾; barley, 1; potatoes, 27; gardens, 17¼; total, 263¾ acres; being 28¾ more than the preceding year. The crop harvested was: wheat, 19 bushels; oats 699; potatoes, 546. Gardens were more or less failures, but some had vegetables during the season and to put away for winter. Home farm had in crop, 1894: oats, 16 acres; oats and pease, 14 acres; potatoes and garden, 3 acres; being 14 acres more than last year. The oats were cut green; oats and pease, failure; 150 bushels potatoes and a fair yield of carrots, onions, cabbages and tomatoes. New land broken, 18 acres; new fencing, 45 acres; hay put up for Indians, 500 tons; and for home farm, 70 tons.

The Indians sold to the police 60¾ tons, Walrond Ranch Company 40½ tons, and to private parties 13 tons, in all 114¼ tons, the balance they sold in single loads and used for their own horses and cattle. I found in many of the corrals hay over from last year. I attended on several occasions at the killing and issuing, and found the

work was carried on in a business-like way, and the beef supplied was of the best quality. The ration-houses were cleanly kept.

The beef registers at both places were carefully examined and checked, and the terms of the contract had been fully complied with in every particular, the agent, or clerk, and issuer, being present on every occasion, as well as the representative of the contractor. Three hundred and forty-eight pounds of beef had been deducted from the vouchers, being 5 per cent on cattle killed outside of the slaughter-house.

The average ration of flour and beef during the 13 months was: flour .64 and beef 1.20 for upper reserve; and .60 and 1.19 for lower reserve. I did not hear a single complaint of any kind, and the Indians were cheerful and pleasant, and there was an air of comfort and plenty in all the houses.

The upper reserve is under the charge of Mr. McNeill, and I never found it in as good order. The cattle shed had been turned into an implement building, and all implements were stored in it. The old fences had been taken down and new ones put up, forming a square; horse stable in one corner and implement shed in the other; on the west side and on the north side the issuer's office and carpenter's shop are situated here. This building had been removed from the old place and rebuilt, and is now a convenient and comfortable place. The tools were nicely arranged, and Mr. McNeill makes many repairs for the Indians. The whole place looked exceedingly pretty, and not a particle of dirt could be noticed. There were two nice fields well ploughed and fenced, in which oats and wheat had been sown. Thirty acres of oats and two of wheat; a forty-acre field had been fenced in as a pasture for the farm horses, the fence is what is called a leaning one. The farm house was in excellent order, and Mr. McNeill had put a wire netting fence around it at his own expense. The whole arrangement about the place reflected the good taste and management of Mr. McNeill. I can only refer to a few of the Indian places in this report. The farthest at the lower end is "Calf Shirt's" village. Four houses here and a good field of seven acres, oats and potatoes and garden good, horse corral and houses clean. "White Calf Chief" had a new house and corral. "Weasel-fat," farther up, had a good house and corral and field; a pretty place; this was a new location. "Blackfoot Old Woman" had a new house, shingled roof, good cattle shed and corral; had 10 head of cattle looking very well, and he takes the best of care of them; a pretty field of 7½ acres, barley, oats and potatoes and garden; a more thrifty-looking homestead could not be seen anywhere. It is on the banks of the Belly River. There were a number of new locations all along this bottom, nice houses and fields and well fenced. Piles of wood were at most of the places, and the women were adding to them daily, showing that these Indians were looking ahead by thus early providing for the next winter. "Little Ears" had a good large house, and a neat railing around it. Seven men and women were cutting potatoes for seed when I called. The house was well furnished with stoves, beds, etc.; has a twenty-acre field, four of which were in crop, oats and potatoes; fence extended to the river; some new breaking, work done with horses; good corral, and logs on ground for a new house for "Prairie Hen." "Running Antelope" had a neat house, whitewashed, also a new house, 20 x 20, shingled roof, top windows, good cellar and wooden floor, not yet occupied; root-house and two pretty fields, one of five and one of six acres, oats, wheat, barley, potatoes and garden. These were the best ploughed and harrowed fields I noticed in this part of the reserve; ploughs, harrows, mower and rake, wagons and other implements were all private. The old house will be used as a stable when he moves into the house. Had a swing for the children. Logs on hand for a cattle shed; implements all under cover; had quite a collection of tools, all private; anxious to get cattle. This desire I found to be general among the majority of Indians.

Little Shields: small, neat house; whitewashed; mud floor; beds on floor; cook-stove; women making moccasins. I found the women generally busy doing some work. Thirty-four gopher skins were dressed and hung up; nice little field, six acres in crop, new location; good stables, and clean all around.

"Takes-the-gun-on-horseback" lives in an old shack, and it was dirty, but has a new house next door, almost completed; field on bench, six acres.

Farmhouse, occupied by Mr. Jones, is prettily situated, being surrounded with trees. The house had been sheeted on the inside with dressed lumber; kitchen walls lined, two porches put on, also storm windows; good fence around the buildings, neat little garden, fence rails fastened with raw-hide; stable roof had been raised, and rail and thatch put on. There was a good well and pump. I found considerable improvement going on at this end of the reserve. The new fields started, the large quantity of fencing, the desire to have a good class of house, and the anxiety of the Indians to have cattle, all go to show advancement. Mr. Jones seems to have good influence over them, and, as far as I could see, is doing a good work here. Mrs. Jones is also interested in showing the women how to bake, knit, and other housework. Some of the women can now make very good bread. There were many other nice places visited at this end, but space will not allow me to mention them here.

At the upper end of the reserve I found the improvements even greater, on the whole, than at the lower. Red Crow village was in splendid shape, all thoroughly cleaned up. The chief's house was in its usual good condition, being comfortably furnished. A nice field of seven acres, and the old chief was working in it himself; has a nice lot of poultry, a large band of horses, and about 25 head of cattle. These were on the ranch up the river, and I will refer to them later on. The house had a carpeted floor, and there was a good sewing-machine. His youngest wife was using it, and seemed quite familiar with the work. The chief would like to exchange some ponies for some heifers. Mrs. Crow had 110 gopher skins, dressed and ready to be made into a robe; her daughter had 70 more for a similar purpose.

"Many-mules" had a clean, tidy house. He had a nice collection of paintings, which were to be sent to England by Rev. Mr. Swainson, and he was busy painting more. I asked him to prepare a collection, and send it to Regina fair; they were well worth exhibiting.

Dead Sarcee: nice house; factory beds, bureau, mirrors, lamps, pictures, small field of oats; second house used as a kitchen; new shed for cows, which he would like to have.

Day Chief: good house, shingle roof; box-stove; three beds; rocking-chair and other chairs; outside kitchen. Had a clock, lamps, and pictures; small garden in potatoes; piles of wood at hand, piles neatly made. A few more new locations and houses in this place.

Iron: neat house; two bedsteads, box-stove, pictures, lamps, tables, chairs; crop with Old Moon; has no cattle, but has a large band of horses; ceiling of house sheeted; good stable; implement shed, hay corral, and cattle shed to be built, logs for which were on the ground; set of new double harness, purchased by himself, and he paid $25 for it; was anxious to exchange horses for cattle.

Left-hand: double house, well furnished; new stable, new shed; field, 12 acres, 8 broken and in crop; has two wagons; three sets of double harness, two of them private, paid $25 each for them; hay rack and implements.

To-morrow: good house, stoves, two beds, outside kitchen, building new stable, 18 x 20; field, 20 acres, 8 broken and 5½ in crop; root-house, corral, large band of horses, logs on ground for cattle shed, and wants to get cattle, paid $25 each for two sets of double harness, new house, 18 x 18; tongued and grooved floor, board roof and sods, squared logs, sashes and doors, well made, fences fastened with hide, but complained that the dogs eat the hide.

Bull Horn: good house, living in lodge; 7 acres in crop, oats and wheat; large hay field, has wagon and harness.

Single Rider: good house and outside kitchen, stable, yoke of oxen at work king drills for potatoes, paid $25 for a set of double harness, logs on ground for ma le shed, hay loft added from last year, comfortable clean place.

Farm-house: occupied by Mr. Clarke, is situated at the upper end of Bull Horn village, house whitewashed, 12 acres had been fenced in for pasture, and a neat fence around house with good gates, trees planted inside, good well and pump, small garden, stable whitewashed, stack of hay from last year. Mr. Clarke is very tasty about his house and also in showing the Indians.

Running Crane: house was in its usual good shape, bedsteads, rocking chairs, washstands, red tablecloth on table, fancy stand-up clock, coal and cook stoves, carpet on floor, buildings inclosed by a well made fence with turnstile gates, basement of house outside built up with round stones and these were whitewashed, which looked very neat, and showed considerable taste, nice field of 6 acres, has mower, rake, 2 wagons, 2 sets of double harness, 2 hay racks, tent for haying, set of carpenter's tools, all private property, cattle shed in hollow, in the brush, anxious to get cattle, has an implement shed and hay shed full of hay, good house, stable, racks for riding saddle, and hooks for hanging other harness. This house is on the bench on the bend of the river and a magnificent view is obtained of the whole country up and down the river. The whole place showed thrift and good taste, and would put to shame many a white man's place. The man is a good worker and does what he is told, and is always agreeable and pleasant.

Big Snake: a similar place on the bench, wants cattle also.

Black Plume: a similar place, also wants to get cattle. All these houses have piles of wood, and what struck one was the neat way this was piled.

Owl Child and Man Who Sleeps: nice house, horse and cattle stable, hay corral; house had iron bedsteads, tables, chairs, lamps, cook-stove; has a yoke of oxen and harness, 10 acre field neatly ploughed and harrowed, leaning fence, pretty place, thrifty men and doing well. I could go on and give names of place after place equally as thrifty, did space permit.

Low Horn has a new field on bottom opposite the Cochrane ranch, ploughed this spring and cropped with potatoes. Four horses used in plough, new located, and pretty place. A number of new places had been started all along here, and stables and sheds put up, but parties have their houses in the older villages as well. Crop-ear has a good house, cook-stove, bedding plentiful, has a churn, and milk pans, and makes butter and bread. This house is only a temporary one. Has a fine house in Red Crow's village, in which were clocks, lamps, &c., has two fields, implement shed, government wagon, and a private one, mower and rake, private, 4 sets double harness, paid $25 each for them, good strong, well-made harness, and good value; fancy stove, wash boards, picks, shovels, spades, augers, &c., all private. Store-house had ten milk pans gathering the cream, a well-to-do-looking place. Sleeps-on-top has a house here also. This place is about two miles above the Cochrane ranch, on the opposite side of the river, and this is where the cattle ranch is located under charge of Crop-ear and Sleeps-on-top.

	Head.
Red Crow had cows, heifers and calves	23
Crop-ear, cows, bull, heifers and calves	23
Sleeps-on-top, cows, heifers and calves	18
	64

and the cattle were in splendid condition, they could not well be otherwise, from the fine grass and clear, sparkling, running water, and the Indians were so fond of their cattle that they would scarcely allow them out of their sight, and had their horses always saddled ready to go after them as occasion required. These 64, with Blackfoot Woman's 10 head, made 74 head of a beginning in one year, which speaks well for the enterprise of these Indians.

There were good stables and sheds, and corrals in a well-sheltered spot, and there was a stream running from a spring past the place, and it never freezes up in winter; a stack of hay was on hand from last year. Some of the new cattle stables and sheds at these new locations had doors well put on with strap hinges, purchased by themselves.

Goose Chief: small field. This is the furthest up field at the upper end of the reserve.

Eagle Plume is next: 10 acre field, 4 acres broken and 1½ acres oats and ¼ acre potatoes. A number of new places were visited also on the south side at

Bull Horn's coulee, some new houses and stables were being put up here or rather old houses and stables removed from some of the older villages. Some nice fields were noticed here also.

Rider village: Rider has a 12 acre field, 4 acres oats and 1½ acres potatoes and garden, has a good neat house, asks for cattle.

White Calf Bull: small house and it was not very clean, has a boy at Elkhorn School, promised to clean up. The new saw-mill was now reached. The ditch or tail-race is 750 feet, and the average depth is 3½ feet. It had not then been completed, but I heard before I left McLeod that the mill was working in good shape, very much to the delight of the Indians. Many of them were about leaving for the timber limits under charge of Mr. Clarke to get out logs and rails and float them down the river. They had a contract to supply the Cochrane ranch with a large number of rails and posts. A covering would be put on the machinery of the mill as soon as the lumber would be sawn. The new house for the school-teacher was in good shape.

White Calf: good house, shingled roof, field in bottom, oats and wheat, and garden, logs on ground for a new house for his son, who was in jail for stealing horses, and the old man felt very badly about the disgrace.

Good Young Man: has a neat new house near Mr. Neill's, well built, panel door.

Weasel Chief has also a tidy little house here.

Black Horse: new house building, old one pulled down, good stable, 8 acres, field oats and garden.

Joe Healy, an Indian, has a neat house, whitewashed and clean all around, white cotton on walls, walnut bedstead, cook-stove, two tables, one with folding sides, chest of drawers, sewing machine, fancy clock, pictures, lamps, rocking and other chairs. His wife was baking bread and very good bread was to be seen and well baked. Washstands, washtubs, smoothing irons, a musical instrument, which was set a going for our special benefit, makes dresses, bead-work, has a complete set of carpenter's tools, outside shutters on house, doors and windows painted, bake pans, and there was a tin cash-box, but I could not see how much was in it, white fancy quilts on bed and scarlet covers on tables, pillow shams, had some garden crop. This was just as snug and comfortable a little place as one could wish for. Two of the man's girls attend the Kissack Home.

Bull Shield had also a good house and as well furnished as Joe Healy's. Mike's house was also equally as neat and well furnished, whitewashed and shingled roof. Has mower and rake, wagon, and double harness; field of 8 acres fenced, 4 acres broken, 2½ oats, 1½ potatoes. The house has a lean-to kitchen; has a set of carpenter's tools, a child's cot, a $70 sewing machine—is paying for it in instalments. An alarm clock was noticed here, also a cash-box, fancy rugs on floor. Mike feels proud of his nice house, and was much pleased, as were all the Indians, to be called upon.

The hospital was inspected on the 13th May. The various rooms were found to be in excellent order. Five patients were in the men's ward, and only one in the female ward. Book-binding is done by the sisters, also shoemaking for themselves. Soap and butter for the use of the house are also made.

The number of patients treated since 1st July, 1894, was as follows:—

Month.	Number in Hospital.	Admitted.	Discharged.	Died.
1894.				
July	13		7	
August	6		1	
September	5			
October	7	2		
November	12	5		
December	14	2	1	
1895.				
January	17	3	1	1
February	16	1	8	2
March	6			
April	7	1		2
May	6	1		

Of the 18 patients discharged 5 were perfectly cured, or nearly so, 9 had improved very much, and 4 went of their own accord without much improvement in their general condition, 3 of them had since died, also 1 who had not been completely cured, on account of a relapse. Although the number of patients had not been in general very great, yet during some of the winter months the work of nursing had been heavy on account of the serious cases under treatment, two or three of the patients at times requiring to be watched day and night for months. Unfortunately, many of the cases were consumption and affections of the lungs, badly attended to at first, and which were brought under medical treatment when it was too late to guarantee any hope of recovery.

I took an inventory of all government property in the institution.

The whole place was in splendid shape except that all the buildings required painting. The mission building and school were also in good order. The church had been supplied with a pipe organ, said to be the only one in the country. One of the sisters kindly played some piece and it was certainly a nicely toned instrument, so far as my knowledge of such things enabled me to judge. This is a pretty little church and the Indians attend the services very regularly. There was a nice garden attached to the mission. The hospital building was fully described in my last report.

The Kissock or Saint Paul's Home was inspected on 7th May.

Rev. Mr. Swainson, principal.

Mr. H. Swainson, principal boys' department.

Mr. H. F. Baker, teacher of the boys'. (Mr. Foote had been teacher for the past year but was then leaving for Prince Albert.)

H. Venn, cook.

E. Hillier, charge of outside work.

Miss Alridge, teacher of the girls.

Mrs. (Rev.) Swainson, matron of girls' department.

Miss Hales, from Regina, to arrive in a few days, assistant matron.

Mrs. H. Swainson in charge of boys' building.

Mrs. Hillier, seamstress.

Number of pupils in Home:—

Boys, treaty	33	
" non-treaty	4	37
Girls, treaty	27	
" non-treaty	3	30
Total		67

The various buildings were in fine order and the whole work was going on in a most satisfactory manner. The boys' building was the pink of cleanliness and reflected much credit on Mr. H. Swainson, who had it in charge. The dining room had the floor stained, seven large tables with benches, sideboard, large picture of the Queen and other pictures, blinds, pots of flowers, making the place look cheerful and bright, kitchen was in good shape, pump in the kitchen and a never failing supply of water, a summer kitchen alongside. Bread is baked on the kitchen range, but an oven outside would soon be needed. Boys' play-room nicely fitted up, bathroom on one side, No. 1 dormitory had 17 iron bedsteads in place of the woden ones formerly in use. Each bed had a wire spring palliasse, filled with horse hair, these were brought from England, two blankets, quilt, sheets and pillows, rag carpet on floor and floor stained, red curtains on windows. Fire extinguishers and barrels of water kept in a handy place. Dormitory No. 2, 17 beds; No. 3, two beds; No. 4, four beds, all iron and furnished same as No. 1.

The school building had been supplied with two porches; the whole of the buildings had been newly painted, sides and ends slate-colour and roofs red; a new stable had been built, room for four horses, and end for tools, harness, &c. Carriage

house in rear of stable; hay-loft over both, capable of holding eight tons of hay. Old stable had been pulled down. Cow stable was further off in the bluffs. Six cows were giving milk, and butter was made for the use of the house. Teacher's house had also been painted, and a verandah put on. Girls' playground had been inclosed with picket fence eight feet high; swing and see-saw; there was a flagstaff, but no flag. A new laundry had been built since I was last here, with four large tubs. Girls do all the washing, starching and ironing, and the boys attend to the garden, cattle, milking and other work. One end of the laundry is used as a store-room. There is a good garden; it supplied the home last year with vegetables, and a quantity were sold to outsiders; 1,500 head of cabbages were stored for winter use, besides potatoes, turnips, carrots and onions. The new root-house kept the roots very well. There is a "giant stand" for the boys, which is a great source of amusement as well as being a healthy exercise. The girls' building I have described before; it was also in the best of order, and iron bedsteads had replaced the wooden ones. The dormitories had been sheeted with dressed lumber, and they looked very well.

Sixty tons of hay had been put up, and 20 tons sold at $8 a ton for the benefit of the home, also vegetables.

The girls knit socks and stockings, and do darning and mending; make dresses, pinafores and aprons. Some good specimens were shown. The sewing and knitting classes are held daily from three to four. I attended the children's service one Sunday, and was much pleased at the order and good behaviour of the pupils, and all joined heartily in the exercises.

The work here was in a flourishing condition, and the fullest justice was being done to the pupils, who all seemed happy and contented. They were, boys and girls, neatly and cleanly dressed. The staff and all were untiring in their respective departments.

The private earnings of the Indians in the agency have been $7,510.11 as follows:—

Mining coal	$ 380 00
Hauling "	725 00
Freighting	1,183 69
Hay sold	1,400 00
Working, wages, &c.	2,000 00
Sundries	1,821 42
	$7,510 11

The amount went into the hands of 170 families, some more or less, and allowing five persons to each family would make 850 persons or more than half of the population, benefited by these earnings, 138 spayed heifers had been accepted in place of steers. These produced the choicest of beef. The population is now 1,402. The births during the past year were 81 and the deaths 103. Health of the Indians at time of inspection was good, as few cases of sickness were noticed during my visits. The Indians had displayed considerable tact in laying out their fields, and in making fences, not a crooked fence could be seen. The water wheel to irrigate the garden is an original piece of mechanism, and was working well. It was a dispute who was the inventor. Mr. Ponton claims that he is the one, whilst the agent says he was the first to give the idea, but between them the garden is irrigated and that is the main point of interest. Twenty Indians had purchased harness during the year, chiefly from Wilson, of Hudson Bay Company, representing Carson & Shore, of Calgary and McLeod, a set each at $25 a set, and one set at $35, making a total of $510. I examined the harness and considered it capital value. A large number of the houses had been whitewashed.

The warehouse had been carefully attended to by Mr. Sanders and balances in store at inventory were found correct in every case. The flour from Ogilvie Milling

Company was of choice quality. The bacon was also choice, very little of this came here. The office work was also well done by Mr. Sanders, the books being neatly and correctly kept. The issuing is done by Mr. Freeman and no trouble or jarring ever takes place. The Indians have perfect confidence in his fair dealing with them. The books only show 1,800 ponies in hands of Indians, but I am satisfied 3,000 would be nearer the mark, and it is a pity these could not be disposed of and proceeds invested in cattle, now that the Indians are clamouring for cattle. It took sometime to get them in this way of thinking, but it did come, and the prospects of these Indians are now brighter than ever before. They are a fine lot of Indians and are capital workers.

There are 50 double wagons now in the agency. The farmers were doing their work well, and the agent loses no opportunity of benefiting his Indians, and I have pleasure in stating that this was the most satisfactory inspection I ever conducted here. Mr. Wilson expresses his gratitude for the hearty co-operation of his farmers and staff generally in his efforts to promote the welfare of the Indians over whom he is placed.

The usual inventories, statement and detailed report were sent to Regina.

The Piegan Agency was my next point, but I received a telegram from Regina to go to the

BLACKFOOT AGENCY,

and I arrived there on 20th May.

Mr. Magnus Begg, agent.

Mr. J. Lawrence, clerk.

Mr. Thomas Lauder, issuer of rations at North and South Reserves.

Kitchips, teamster.

The agency buildings were in good repair, and the place all around was in capital order. The agent had a nice little field for a garden, but at the time there was no growth, the season being backward, cold, and dry. The issuer, Mr. Lauder, was occupying the interpreter's house, being more central for his work than living at the South Reserve. He had the house nicely fixed up, and had a nice garden, prettily laid out and neatly fenced.

The South Reserve, No. 146, *or Farm* 20 *A,*

was first inspected, G. H. Wheatly, farmer, and Old Man at War, as scout. The farm buildings were in the best of condition, a coal shed had been put up, and two porches added to the house, and a ventilator had been put in the horse stable. Mr. Wheatly had a good garden, neatly fenced, and trees planted all around; had about half an acre of wheat, and the usual assortment of vegetables, all showing promise of a good crop. I visited all the villages on the reserve, houses and fields. The Indians were chiefly living in lodges, but had left their houses clean, as well as the surroundings, and not a particle of dirt could be seen. The houses, with one or two exceptions, had been whitewashed in and out. Chief Running Rabbit had carried out his promise made to me last year that he would build a new house and have bedsteads and tables. He had built a very good house, 30 x 16, shingled roof, wooden floor, panel doors, and had three bedsteads, tables, cupboard, &c. The old house will be used as a store-room. He had purchased a new wagon to haul coal. The chief had a good fur coat made from one of the hides. Some of the other Indians had similar coats.

White Wolf was building a new house, walls were up. The Roman Catholic mission building had been improved by new siding on the walls outside, and a new carriage shed had also been put up since I was here last.

High Eagle village was the farthest on the east end of the reserve, being about 15 miles below the farm buildings, and about two miles from Crowfoot station. High Eagle had a nice house, with wooden floor. There were four other houses and some stables in this village, and two very nice fields, and the grain was coming

up well, about 15 acres in all, a pretty location on the banks of the Bow River. There was a good garden, in which turnips, carrots, onions, and potatoes had been sown and planted. Weasel Calf village (Crowfoot's old place) had two houses, all clean and neat, and a good field, 18 acres, in common. Some of the houses had painted roofs. Head Bull village is a new one since I was here last. Seven houses here. This is where Scraping High was shot, and the house he died in had been pulled down, and the logs sold to Beaupré for firewood.

At Eagle Rib's village, upper end, three new houses had been added on the south side of the river; one built by Bear Shields had a shingled roof. This man had a wagon, mower and rake purchased with proceeds of hay sold. Little Gift had walls up for a new house. Three pretty fields here, well ploughed and harrowed. Three more houses farther up the river, Yellow-woman's, Cowskin-moccasin's, and one was vacant. Three new stables. Eagle Rib's house had a shingled roof, painted red, and had boarded ceiling. The whole village was perfectly clean, implements under cover; good hay racks were to be seen. This is a pretty village, and the land is good on the south side of the river. The school building was in good shape, but, unfortunately, it was accidentally burnt to the ground before I left the agency.

The St. John branch boarding school in White Eagle village was inspected on 28th May.

W. R. Haynes, manager,
Mrs. Haynes, matron,
W. H. Bandhill, teacher.

I can speak in terms of praise only of the good management of this institution, and the splendid shape everything was in, proving Mr. and Mrs. Haynes to be capable and painstaking managers.

The cellar was as dry and airy as an ordinary room; it was boarded on the sides, and had a wooden floor. Bread of good quality, baked by the boys, was kept here.

Boys' bath-room: the bath is a picture, and it is supplied with hot water from the kitchen range, carried through pipes. The cold water is got from a well alongside the furnace. There was a pump and a plentiful supply of water. The bath-room had three washbasins, towels, soap, and looking-glass, all very clean and tidy.

Furnace room: one furnace heats the two wings, and the school-room was heated by a stove. Coal was easily put into the bins alongside the furnace. Boys' play-room was a cheerful place, and had tables, benches, books, cupboard for moccasins, heated from furnace. Large porch to the entrance to the playroom.

The dining-room is a very nice one; four large tables covered with white oil-cloth, and small table for staff; slide from the kitchen; shields, mottoes and flags, evergreens and wild flowers, the whole giving a pleasing and cheerful appearance. The mottoes were: "Home, Sweet Home," "Canada Forever," "Alberta Our Home," "Glory to God in the Highest," and "Behold, I Bring You Glad Tidings." Red curtains; brackets, on which were placed wild flowers, picked by the boys.

Mr. Haynes's sitting-room: a small organ was here, purchased from proceeds of a concert held in the school in September, 1894, and $20 collected by Mrs. Wheatly.

Office and clothing-room, where the medicines are also kept, being neatly arranged on shelves.

Main hall and main entrance: a pretty plot in front; grand walks, and trees planted on both sides of carriage entrance; flower garden is here also.

Kitchen: large range; tables with zinc covering, and the pink of cleanliness. Off the kitchen is the work-room, with sewing machine, and on the other side is the pantry and store-room, all articles being neatly arranged. One thing is certain, the boys will not learn untidy habits under Mr. and Mrs. Haynes.

Boys' Dormitory No. 1.—Ten new iron bedsteads; room for twenty; each bed had spring mattress, palliasse filled with hay, two sheets, two blankets, quilt, pillow, and the boys had night-shirts; all was perfectly clean.

Dormitory No. 2.—Seven beds; room for ten; same as No. 1, and ventilation in both was good. Mottoes in each place, such as: "God bless our Indian Home."

Dormitory No. 3.—Eighteen iron bedsteads; unoccupied; fine airy room; work cupboard; linen cupboard, goods being neatly folded and arranged; assistant matron's room. A long ladder was here to reach the bell, tower and flag-staff, or to be used in case of fire. Teacher's room and library; principal's bed-room.

A frame stable and buggy-house, with painted roof. Main building is also painted, roof red and sides and ends slate-colour. Four water-closets; also in good condition. There is a summer kitchen, and a good vegetable garden of one-quarter of an acre. There was an ice-house, also painted; belfry and bell. The school-room is at end of the building, and is roomy. There is a chancel at east end and folding doors, so that Sunday services can be held. Two Indian services are held every Sunday, and one in English. As many as 20 Indians have attended, as well as the pupils. The number of pupils in the home was 17.

The home was opened 1st September, 1894, with 3 pupils, transferred from North Reserve school. Two more came in November and December, and the rest on 22nd January, 1895, the total now being 17. The school lot is a 150 yards square; 13 maple trees had been planted, given by Mr. Wheatly, who had raised them from seed; 27 fir trees, native; 190 poplar, native; 5 Saskatoon, native; 90 gooseberry and 30 creepers. The whole place was a model of good taste and management. This home, as well as the parent one on the North Reserve, was under the superintendence of Rev. Mr. Tims, who conducted the religious services on Sundays.

The crop put in on this reserve in 1894 was: wheat, 5 acres; oats, 83; barley, 48; potatoes, 35; turnips, 7⅛; carrots and onions, 3; total, 181⅛. The crop harvested was: wheat, 14 bushels; oats, 95; barley, 20; potatoes, 398; garden produce consumed during the season. New land broken, 18 acres; summer-fallowed, 71¾. Number of new houses built, 11. Purchased by Indians, two each, mowers and rakes. Hay stacked for farm, 70 tons, and for Indians, 134 tons. Hay sold, 81 tons, and fed to Indian stock, 53 tons, consumed by farm stock, 60 tons.

Wolf Leg has two cows and two spring calves, and he had purchased three milk pans, milk pail, a strainer and cream lifter. Calf Bull has three cows and one heifer, yearling, a total of eight head of cattle in hands of Indians on this reserve; a small beginning, but it is a beginning in the right direction. The older of the Indians, headed by the chief and minor chiefs, have always been opposed to keeping cattle, and the last words of Chief Crowfoot were not to keep cattle; but these prejudices were being removed, and a better prospect existed of many of them getting rid of the useless ponies and taking cattle in place of them. The crop put in in 1895 was: wheat, 15 acres; oats, 70; barley, 30; potatoes, 20; turnips, 4; carrots and onions, 2; making a total of 141 acres. The fields were clean and neat. Land was good and had been well ploughed and harrowed, and with reasonable moisture there should be a good yield. The farm stock and working oxen were in good order. The beef supplied during the year was reported as having been good. That supplied at the time of inspection was not up to the requirements; but as the grass was getting better every day, the beef would also improve. Some allowance is always made for the beef in the spring of the year. The quality had greatly improved before I left the agency, but the animals were small.

The beef register was carefully examined and the entries were found to be correctly made. Mr. Lauder was doing the issuing in a business-like way and he was well liked by the Indians. An inventory of property in hand of farmers was taken and books examined. Mr. Wheatly keeps everything in good shape and the whole place looked exceedingly neat. The white houses of the Indians and terra cotta painted farm buildings, and green trees along the river bank in the valley, formed a pleasing contrast, and the view coming over the hill, with the winding river to the right, was a pretty one.

The North Reserve, or Farm 20 *B*,

was next inspected. Mr. W. M. Baker, farmer, James Appokokee, scout. Considerable improvements could be noticed in the way of new and better houses, and furnishing of beds, tables, &c., and also in the matter of cleanliness. The outside

of the houses had been thoroughly cleaned up. I visited all the villages, houses and fields here. I can only refer to a few, as samples, in this report.

Yellow Horse village: Yellow Horse has a nice clean house and a fence around it, posts peeled of the bark, and wired. Walls up for a new house, had lumber and shingles on hand but not sufficient to floor it, a nice 10 acre field of oats, barley, potatoes and turnips, well fenced. This is a deserving man and he is anxious to get along.

Running Crane: neat house and place very clean all around, houses all whitewashed, root-house, and logs were on ground for another new house. The field of 10 acres was in common. The frame buildings were in good shape. The implements not in actual use were stored in the large shed. The store-house is a compact little building. The flour is stored on the ground floor, and the upper flat is used for storing the smaller implements, tools, harness, &c.

Raw Eater Village

consists of four houses, a small field of 2 acres. The houses were all vacant and Indians were in their lodges. I counted one day over 100 lodges in the valley. I counted also over 100 men working on the irrigation ditch at the lower end and 18 working near Raw Eater village at the upper end, where some of the sides had fallen in and they were shovelling the earth out. I met Mr. Ponton here, and he seemed to be very busy attending to his brigade of workers.

Crow Shoe Village

has ten houses and I noticed lumber and shingles on hand for new houses, a good field of 12 acres of oats, barley and potatoes. Most of the houses were whitewashed.

Old Sun's Village.

The houses here were all whitewashed and looked very well on approaching the reserve from the hill, also the mission buildings with their red roofs and green sides and over a hundred lodges, of all colours, all along the valley.

Big Road had walls up for a large new house, which was to have a shingled roof.

Red Old Man had built a large new stable and had a good field.

Yellow Fly had also a new house with shingled roof.

Boss Rib Medicine had a new stable and a good garden. House had a shingled roof and a lean-to kitchen.

White Pup has a large double house, shingled roof, 32 x 16 divided into rooms, one half the ceiling is sheeted with dressed lumber. Large field fenced, to be summer-fallowed; had a good field further on of 6 acres in crop, also well fenced; good corrals; and place tidy and clean all round.

Many Shots Village

has ten houses.

Little Axe has a good house, two bedsteads, table, oil-cloth cover, cook-stove, lamps, cupboards, walls covered with comic pictures cut from newspapers. Has mowing machine, rake, and harness. Three good stables for horses and cattle, was building a new house and was getting lumber ready for a new stable, good corrals, milks seven cows and makes butter and supplies the mission at 15 cents a pound but got 25 cents and 30 cents for it from those working on the ditch. Has a nice herd, the only one on this reserve; but his success is having a good effect, as others are now making efforts to get cattle. His herd consists of: bull, one; cows, 11; steers, 3; heifers, 2; bull calves, 3; heifer calves, 7; total, 27. This is a good beginning and Little Axe feels proud of his success. He sold two animals

during the year to the department and invested the proceeds in the purchase of younger animals. A few more enterprising men like Little Axe would soon make a revolution in the working of the reserve. It may be stated, however, that this man has incurred the ill-will of some of the other Indians by keeping cattle, but he pays no attention to them. He pulls the money out of his pocket and says, "see what I have got for my butter." The agent gave him an old dash churn which had been used at the agency, but Little Axe was not satisfied with a dash churn, and at once purchased a barrel churn for himself.

Running Marten Village

has nine houses, one new one.

Appokokee has a good house and stable, a fifteen acre field, seven acres in crop, house has painted roof.

Little Chief Village,

ten houses, one field of ten acres and three smaller fields. Two new houses in course of erection.

Bad Boy built a new house this spring. The fields were well ploughed and harrowed, and growth could be noticed where the land was damp, but where it was dry nothing had, at the time, sprouted. I walked over the irrigation ditch; about six miles in all have been dug, more or less deep. The first half mile or so from the entrance from the river is a natural channel, and only very little cutting was required. Then the beginning of the ditch really takes its start. For a short distance the cutting is twelve feet deep, then more natural channels are met with, and from that down to the bottoms, which are to be irrigated, more or less cutting was done. Stop gates have been put on at different points, and the whole promised to be a success.

The St. John's Home, or Boarding School, was inspected on 30th May. Rev. Mr. Tims, principal; L. F. Hardyman, manager; W. H. James, teacher; Miss Turner, matron; Miss Haynes, assistant matron; Miss Garlick, housekeeper and cook.

The buildings had all been painted, roofs red and sides and ends a light green, and they looked very well. A gravel walk had been made in front of the buildings. As I described these in my last annual report, I will only refer now to any changes or additions. The dining-room looked cheerful, walls being covered with pictures. A new knitting machine had just arrived. The old lavatory had been turned into a wash-room for the boys. The old play-room is now the lavatory. Bath is a fixture with three wash basins and towels and a stove. Boys have a bath once a week. A new play-room, 18 x 24, for the boys had been added. Dormitory upstairs, with the addition of the space over the play-room (18 x 24) added to the old dormitory, gives a fine large dormitory, 44 x 18. Four windows, and also a new window at the top of the stair landing, and 19 beds are in this dormitory. These are iron and have replaced wooden ones during the year. Each bed has a spring mattress, a palliasse filled with hay, two sheets, blanket and quilt (more covering in winter), pillow, and boys have nightshirts. Pictures are hung at each bed. The room is a bright and cheerful one—ample room and ventilated well. Dormitory No. 2, for the senior boys, had nine beds, also iron, furnished same as No. 1, mottoes and pictures, and room was very neat. On the girls' side of the building a new play-room, similar to the one on the boys' side, had been put up, making their dormitory also 44 x 18—four windows. Fourteen beds were here; these were iron, in place of the old wooden ones. There was space in this room for 25 beds and shelving for clothing, each girl having a separate compartment; beds furnished same as the boys'. These dormitories are heated with pipes from stoves below; rag carpets on floor, motto Christmas cards in profusion, and all very clean, showing that the matron, Miss Turner, looked well after this part of the work.

The school-room, separate building, had two porches added. The work of the school will be shown in a separate report.

The new hospital was about being completed. The entrance hall is 12 x 12. Ward No. 1 is 18 x 18, 12 foot ceiling, which is sheeted with dressed lumber and the walls are lathed and plastered, a very nice room, three windows. Ward No. 5 is also 18 x 18, finished same as No. 1, two windows, dispensary and bath-room, shelving for medicines, kitchen 15 x 13½. Good pantry and cellar with space for a furnace, should one be put in. Nurse's room 9 x 12. Upstairs the space is 20 x 24 over the building except the wards, nine foot ceiling, and can be used as quarters or any other purpose. The main door has stained glass, and there is a neat platform at the entrance. The whole building was painted light green on the outside and roof red. The older boys assisted in the building and were paid 25 cents a day by the contractor. Two boys were working when I was there in putting up a summer kitchen for the principal's new house. There is an avenue running along in front of the buildings and trees planted on both sides, 125 having been planted on Arbour Day.

Rev. Mr. Tims's new dwelling had been completed. It is two story, down stairs is used as follows: sitting-room, dining-room, work-room, bed-room, kitchen and pantry. Upstairs, four bed-rooms, office and study. There is also a good cellar. The whole inside finishing is done with British Columbia lumber. Four of the boys had constant work at the building, receiving 25 cents a day, Rev. Mr. Tims having made this arrangement with the contractor.

The old mission building is now used as a kind of a class-room by the young women who were formerly pupils in the home. Material is made up under the supervision of Mrs. Tims and Miss Symonds. Twelve patch quilts were made for the use of these young women, also stockings, mitts, cuffs, mufflers, dresses; men's and boys' shirts, socks &c., were also made. They are supplied with a cup of tea in the afternoon. The meetings were held regularly during the winter months and the young women take quite an interest in them. A number of the articles made were kept for me to see, when they were allowed to be taken away by those who made them.

The whole place was in very good shape, being clean and neat. I attended the services on Sunday morning; these were partly in Blackfoot and partly in English and were interesting, and the singing was joined in heartily by the pupils. A few of the older Indians were also present.

The crop put in on this reserve in 1894 was: oats, 27 acres; barley, 33; potatoes, 34; total, 94 acres—almost a complete failure owing to dry weather, only 4 acres of oats and 2 of barley were worth cutting. The Indians had, however, about 1,000 bushels of potatoes; 284 tons of hay were stacked, part of which was fed to farm stock and Indian horses, and balance was sold by the Indians; 30 acres of land had been summer-fallowed; no breaking, as it was considered best to see how the irrigation ditch would work when new fields would be started. The crop of 1895 was: oats, 33 acres; barley, 25; potatoes, 12. "Crow Shoe" purchased a new mower and rake for $90; $65 of this was paid out of treaty money by him and his people and the balance from hay sold. "Big Road" purchased a second-hand mower and rake, for which he and his people paid $50 out of their treaty money. In both these cases the money was first paid or advanced by Rev. Mr. Tims. There are five other mowers on the reserve owned by "Appokokee," "White Pup," "Little Calf," "Raw Eater" and "Little Axe." The one owned by "White Pup" was issued to him by the department, the others were purchased by the Indians themselves. "Boss Rib Medicine" purchased a second-hand wagon for $50 and paid for it out of his treaty money. This makes five private wagons on the reserve and there are five government wagons, making ten in all. The farm stock were in the best of condition, the oxen being particularly fat and healthy. The slaughtering of the cattle and issuing continues to be done in a business-like way.

The beef register was carefully examined and was found correct. The farm books were also audited and an inventory taken of property in hands of farmer, and all were found correct. Mr. Baker keeps his books in good shape, and is painstaking and careful in all he does, is peculiarly fitted for the position he fills, and is well liked by the Indians, who seem to have entire confidence in him.

The warehouse at agency is well looked after by Mr. Lawrence, and all was found satisfactory at the inventory. The flour from Joyner & Elkington was choice and made capital bread. The bacon from T.Lawry & Son, Hamilton, was also choice, being equal to the best breakfast.

The office work was also carefully attended to by Mr. Lawrence, books were all written up, and were correctly kept. Mr. Lawrence gives his undivided time to the duties of the office, and not a detail is overlooked by him. The individual earnings of the two reserves were, for hay sold, coal mined and sold, wages as servants, and work on irrigation ditch, $4,747.05.

The births during the 13 months were 65, and the deaths 113. The present population is 1,251. There had been a good deal of sickness and numerous deaths during the winter and early spring and consequently a number were in mourning. I found the Indians on both reserves agreeable and pleasant; no doubt the late troubles had disturbed them; this seems to have been more noticed by the staff than by myself. The agent, Mr. Begg, continues to discharge his duties faithfully, and he has the entire confidence of his Indians, an important matter in an agency like this. I consider that the agency has made very satisfactory progress during the year. The usual inventories, statement and detailed report were forwarded to the commissioner, Regina. After reporting on one or two other matters I proceeded to Calgary, and Morley, and commenced my inspection of the

Stony Reserve

on the 11th June. P. L. Grasse, farmer in charge, but reports direct to Regina; Jacob Two-young-men and John Abraham, herders, but are paid out of Indian cattle fund.

Some improvement had been made to the farm buildings. The house had been sheeted on the outside with dressed lumber and a lining of tar paper. The outside had had two coats of paint, and inside oiled and varnished, and doors and window frames stained, and the roofs of all the buildings painted, the whole place having a neat and tidy appearance. A summer kitchen (log) had been added, and is connected with the house kitchen by a porch. There is a good ice-house. The old office building is now used for Indians to take meals in when working about the place. There is a flag-staff, but no flag. There is a good implement shed, where mowers, rakes, wagons and other bulky articles were stored. Adjoining is the horse stable, with hay loft, over both stable and shed. All have shingled roofs and walls whitewashed. Store-house, two flats, also shingled roof and painted and walls whitewashed. Poultry-house. Some very good bob-sleighs were noticed, made by the Indians. There are cattle and hay corrals. There was a well dug at the foot of the hill near farm buildings and a good supply of water obtained at a depth of nine feet. Walls were up for a new office and to hold the medicines 20 x 20. About 2,000 feet of lumber were on hand, whip-sawed by the Indians, to be used for repairs. Some good sleigh-runners were noticed in the carpenter shop (old store-house) where a lot of work is done by the Indians themselves in fixing up things. The root-house was in good order and kept the roots in good shape all winter. The whip-saw frame is in the face of a coulee. The bridge had been repaired during the year by putting in new breakwaters. The Indians did work to the amount of $150 and supplied lumber to the value of $300, and donated $250 in cash, to come out of the band fund. The slaughter and ration houses were in good order. The latter is well supplied with blocks, tables and hooks. An old Indian house had been put up alongside of the ration-house to be used by Indians when they have to wait for rations. The house is 24 x 18, and has two fire-places. Two fields had been fenced in, one of 25 acres and one of 300 acres, for pasturage for the farm stock. A new fence had been put up from the bridge to the mission property, about two miles, to keep settlers' cattle off the reserve, and on the south boundary, four miles of fencing had been put up and nine miles more require to be done. The fences are the leaning kind, strong posts and rails. About two miles are pine, where rails could not be got in, owing to the roughness of the places. The fences around the farm

buildings were well made and had good gates, and everything showed enterprise and good taste on the part of Mr. Grasse, all of which had a good influence on the Indians, as I found a general desire on their part to have nice places, neat fencing, corrals, square fields, better houses, summer kitchens, small railings around their houses, and in many other ways I noticed improvements to a much greater extent than ever before.

The beef supplied was of good quality, and was well butchered.

The Indians supplied 74 head. The hides were making good winter coats, and it would be well to see more Indians supplying themselves with these.

The crop put in in 1895 was as follows:—

———	Oats.	Potatoes.	Gardens.
	Acres.	Acres.	Acres.
Bear's Paw	5	3	1
Jonas	4	6	1
Chiniquy	5	2½	¾
Home Farm	.....	¼	¼
	14	11¾	3

The oats gave no return. Bear's Paw had 42 bushels of potatoes, Jonas 89 bushels, and Chiniquy 44 bushels. Home Farm, 6 bushels. Garden produce was trifling, and was consumed during the season.

Land summer-fallowed in 1894, 22 acres.

Hay put up by Bear's Paw, 32 tons; Jonas, 30 tons; Chiniquy, 30 tons; Home Farm, 23 tons; total, 115 tons.

Crop put in, 1895, was: oats, 43 acres; potatoes, 8½ acres; gardens and turnips, 4 acres. The growth at the time of inspection was backward, owing to cold, dry and windy weather, but a three days' rain ending with a snow storm, on June 15th, did a lot of good.

Seven new houses were built during the year, all of a neat style, and besides these, several old houses had been pulled down and rebuilt, and others enlarged by adding summer or lean-to kitchens, or wings, and many had new doors or windows, and other improvements, and the Indians kept their houses very clean on the whole. Two new stables had also been built. At some of the houses I noticed wind-breaks in the shape of long posts placed close to each other on the north-west sides of the houses, where the strong winds generally come from. I visited all the occupied houses on the reserve. All rubbish had been cleaned up and burnt.

Chief Bear Paw's house was in good shape, floor painted, house divided into two rooms, with an upstairs flat, new cooking-stove, and it was shining as bright as a new shilling. Good stable and corral, and field of ten acres, summer-fallowed last year, in crop, oats, &c.; fences good.

Peter Wesley had a new house not quite finished, but found it would be too small, and had commenced a larger one, and would give the other to his son. The one for himself is 30 x 24, good square logs; will have upstairs rooms; has panel doors. Window frames, and lumber, and shingles, all on hand to complete both.

There is a good spring near the house. This place is on the north side of the Bow River and Canadian Pacific railway; has five acres in crop of oats, potatoes, turnips, and garden; good stables for horses and cattle; corrals, &c.; milks three cows; is enterprising; has two children at the orphanage, and an older girl, now discharged, is cook in that institution, earning $8 a month. He has a good stallion, and charges the other Indians for its use.

Joseph Swampee was building a nice house. Old house had bedstead, cook-stove, and wooden floor; has two small fields in oats and garden. The northern boundary was here reached. Five miles of fencing had been put up to keep the

ranchers' cattle from coming on to the reserve from this side. The ruins of the old original mission can be seen in this locality; they border on the end of a small lake.

Paul Two-young-men has a neat little house, with wooden floors and painted doors; is building a wing to the house, a stable, and a corral—a neat place.

John Two-young-men was building a new house, and had piles of whip-sawn lumber ready to complete. The roof would be slabs and sod.

Sam Cecil has a new house, wooden floor; good doors and windows, bedsteads; roof of house double-boarded, small stable.

Noah and George Cecil had walls up for new houses here also, and lumber ready to complete them. This will be a pretty little village; it is the farthest on the north side. Land is good, and hay fairly plentiful, best of pasturage, and abundance of building timber and dry wood.

John Rocky Mountain had a nice house, and it is comfortably furnished; wagons under cover; good field; building a lean-to with a good cellar. These are but samples. Most of the houses have been whitewashed, and the villages looked clean and neat, among the hills and pines and other trees.

The McDougall Orphanage was inspected on 10th June. The staff consists of: J. M. Butler, principal; Mrs. Butler, matron; Miss Kent, assistant matron; Mrs. Cassels, seamstress; J. B. Shaw, teacher; Robert Downey, farmer and carpenter; Mary Wesley (a former pupil), cook, at $8 per month.

The crop put in this year, 1895, by the school was 32½ acres of oats, and two of potatoes, turnips, and gardens. Forty acres of new land had been broken in 1894. The stables were in good condition, and the old school building was being used as a storehouse. The fences were good all around.

The cattle were in fine order; the number is as follows: one yoke of oxen, property of department, good working animals; property of mission: cows, 25 (7 giving milk); heifers, 11; steers, 17; bull calves, 4; bull, 1; total, 58; horses, 17; poultry, 40; sheep, 7; lambs, 6. The bull was a thoroughbred Holstein, and although only two years' old, weighed over 1,000 pounds; cost in Manitoba, $75, and freight in bringing him up was $85. Mr. Eaton, of Toronto, who had lately visited the orphanage, donated $100 to be invested in the purchase of more sheep. The house had been regularly supplied with milk, and all the butter required was made in the house.

The crop put in in 1894 was: oats, 40 acres; and 1½ acres of potatoes and gardens; 300 bushels of potatoes were gathered, enough to last the house for the year and for seed. The garden was destroyed by gophers; the boys killed 4,000 of these, but it seemed to have little effect in stopping the ravages of these pests. Eight loads of green feed were got from the oats. Thirty-five tons of hay were cut and stacked by the boys, one man assisting.

A new roof had been put on the main building during the year, placed on top of the old roof, but with more of a pitch, and is properly water-tight; the roof is a shingled one. Storm windows had been supplied, which added much to the comfort of the place. The whole of the rooms had been kalsomined from top to bottom. The kitchen had been enlarged by removing the pantry. A new laundry (log) connecting with the kitchen, had been put up, and a small wing alongside, also connected with the kitchen, to be used as a pantry and store-room for small articles. The office, reception-room and principal's room had rag carpets on floor. Some good mats, made by the girls, were noticed; the windows in these rooms had inside blinds. The dining-room had four tables for pupils, and one for the staff; kalsomined light green walls and white ceiling; motto: "Feed My Lambs," on one side; room wainscoted and painted drab. Basement was in good repair; the furnace is at the east side of the building, boys' bath-room is here also; the bath is a fixture, also four wash basins fixed in; one side is a play-room for the boys. On the other side of the building is the girls' bath-room, fitted up same as the boys'. There are good arrangements in the way of drainage for carrying off the waste water. Kitchen had been kalsomined light-blue on walls and white ceiling. The new pantry is 12 x 9, and is fitted up with bins for flour, oatmeal, pease, barley, beans, &c.

The girls bake the bread and it was very good, being well baked. There is a well and pump in the kitchen, but very little water is obtained. The new laundry is 18 x 20, with a covered entrance to the kitchen. Drying-room will be upstairs. The boys did all the work of building the laundry and pantry, and got out 800 pieces for fencing besides. The boys' dormitory contains 14 beds. The beds are a combination of wood and iron; each bed had a wire mattress, a palliasse filled with hay, and blanket, two quilts, pillows, no sheets, but boys had night shirts. This room was kalsomined light-blue with white ceiling and looked very well. Teacher's room at one end. Girls' dormitory, No. 1, contained 13 beds, furnished same as the boys'. Dormitory No. 2 had 6 beds; kalsomined light pink on walls, white ceiling. Cupboards for clothing, each girl having a compartment; pictures on the walls. Assistant matron's room at one end. Sewing-room kalsomined light green; two sewing machines here. The girls also do a lot of mending as well as new work. The time-table is:—

1st bell—Rise, 5.45.
2nd " —Breakfast, 7.15.
3rd " —Prayers, 8.
4th " —School, 8.50.
5th " —Dinner, 12.15.
6th " —School, 1.20.
7th " —Supper, 6.
8th " —Prayers, 8.15, and go to bed.

Children's service every Wednesday evening at 7 o'clock. Sunday school on Sunday morning at 10 o'clock, and attend Morley church every Sunday at 4 o'clock.

The new school building erected since last inspection is situated about 200 yards in rear of the main building on a higher bench. It is 24 x 30, 10 foot ceiling; cold air comes in at the sides and there is a cupola with ventilator in the centre of the ceiling; separate entrances for boys and girls; good space for hanging dresses, coats, etc. Six large blackboards fixed in with slating on the walls. Ceiling tinted blue, plastered walls, which are white. Nine windows; wainscoted all around; double doors inside and work both ways. Stone foundation, two chimneys, roof painted slate colour, sides of building have had two coats, but were to get another. The whole building is well fitted for the purpose, and has a bright and cheerful appearance. The number of pupils in the Orphanage is 23 (boys 12, girls 11); the number on the roll was 31 (boys 15, girls 16), but some were absent on leave and owing to sickness. A good deal of sickness had beeen experienced during the past winter, and the school had to be closed for six weeks and the school-room turned into an hospital; whooping cough, chicken-pox, ending in inflammation of the lungs. Dr. Lindsay attended regularly. Five deaths occurred, one boy and four girls. The building and equipment generally were all that could be desired for carrying on satisfactory work, and when the number of pupils would again reach the accustomed limit, it was expected the work would go on as efficiently as heretofore.

The cattle belonging to the Indians were in splendid condition. Band "B" has 386 head as compared with 239 last year, and bands "A" and "C" had 324 as against 207 the previous year. The cattle ranch books had been correctly kept, and the total number of cattle (710) are held by ninety-five heads of families in numbers ranging from one head to forty; one herd is on the south side of the river and one on the north side, and were all on view; the Indians taking the liveliest interest at the round-ups. The cattle were properly branded. All the Indians here are now anxious to have cattle. There were 81 good sheep. The earnings of the band were estimated at about $900 for wood sold, hides tanned, herding, freighting, acting as guides to tourists, working for white people, putting up fences, &c.; fur sold to traders in the mountains, was estimated at $3,000 in trade value. The office work is well done by Mrs. Grasse, books neatly and correctly kept. The flour from Ogilvie Milling Company was choice and made beautiful white bread. There was

no bacon on hand, but I was told what had been delivered was very good. Lawry & Sons, contractor. The Indians had purchased a number of articles with their own money. Amos purchased shingles and lumber to the amount of $30; Peter Wesley, lumber for floor, doors and windows; John Abraham, doors and windows; Chief Chiniquy, lumber to the amount of $30; Jonas Two-young-men, wagon, $90, and a set of harness, $30; Bear's Paw, chief, a cook-stove; John Rocky Mountain and father, purchased shingles, lumber and nails to the amount of $20; Paul Ryder, lumber for $11; and other smaller amounts, but all for useful articles. The health of the Indians at the time was very good. The satisactory increase in the cattle is no doubt owing to the constant and careful herding, and also to the introduction of thoroughbred cattle. Mr. Grasse is to be complimented on the good care bestowed on the herds as well as for his management of these Indians generally. They had no complaints to make, and all were pleasant and agreeable. The usual inventory was taken and this, with detailed report, forwarded to Regina. The inspection was a satisfactory one in every particular. Before leaving this reserve I inspected the supplies sent in on contract 1895-6. The standard samples, and also samples of the new deliveries were forwarded by express to me from Regina. I found the goods, with one exception, equal to the standard samples.

The births during the year were 10 and the deaths 20. The present population is 570.

I now returned to Calgary and took the train for McLeod, arriving at the

Piegan Agency

on 23rd June, Mr. Nash kindly driving me from McLeod.

Mr. H. H. Nash is agent; Mr. G. F. Maxfield, clerk and issuer; Mr. J. W. Smith, farmer for lower end of reserve; Mr. W. H. Cox, farmer at upper end of reserve: Mr. H. Dunbar, teamster and interpreter; "Benny," an Indian, assistant issuer, at $6.50 a month; "Plenty Robes," scout; "North Peigan," scout, both at $10 a month; "Sunday," mail carrier, at $5 a month.

The agent's house had been sheeted on the outside with dressed lumber and tar paper and a new kitchen added. A picket fence had also been placed around the buildings. The house was also painted—walls slate colour and roof red. There were flower and vegetable gardens.

The farm buildings had been improved by the removal of the old horse stable. The cattle shed is used as a horse stable, stalls having been put in, and one end used for storing hay. A whip-saw frame had been put up near the root-house and some sawing had been done. Considerable work had been done on the irrigation ditch commenced by Mr. Nash, and which was likely to prove of much benefit to several hundred acres of land along the bottoms. The water is brought from Old Man's River, about three or four miles from the agency. The ditch is from two to four feet deep part of the way, then natural channel for a mile or so, then cutting all along until it reaches the fields below the agency. The water from Beaver Creek also flows through the ditch. As many as fifteen teams, with scraper and plough, and thirteen men had been working on the ditch, in all, about 290 days' labour had been bestowed on the job and, when completed, it was expected its benefits would fully recoup the labour and time given to it. A good deal of rock and stone had to be taken out. Four dams had been made. Mr. Nash deserves credit for his energy and enterprise, and there was little doubt but success would attend his efforts.

Farm buildings, store-house and office, sheds, etc., were painted, and looked very well. The whole place was in splendid shape. The same may be said about the whole agency, as I did not find a dirty house in any of the villages and all rubbish had been thoroughly cleaned up. Fields and fences were neat and tidy, all showing good care and management.

I visited all the villages and fields in the agency and can only report a few here. The houses, as a rule, were closed and Indians were living in lodges.

"Born of the Tooth" had a new field of six acres partly broken, oats, potatoes and garden, good fence, top rail and two strings wire, posts peeled of the bark.

"Iron-shirt" a neat field of eight acres of oats, potatoes, turnips and garden, good fence. "Running Wolf village," seven houses here, place thoroughly cleaned up. The old blind man who had a dirty place last year had one of the tidiest this year, and he had a nice pile of wood for the winter. Two pretty fields here, one 1½ acres and one 2½ acres, potatoes and gardens.

"Sunday" was building a new house. Walls were up, good stable and corral, and a pretty field of ten acres, two of which were in crop. House all whitewashed inside, but there was not lime enough to do the outside, and these would be done in the fall. Two root-houses here and these kept the potatoes very well during winter. "Running Eagle" had rails and posts and holes dug for a new fence of about five acres, a pretty place. "John Smith" has a good house and two neat little fields, usual crop. This is one of the prettiest locations in the agency. A splendid view up and down the river is obtained from the point where the house stands. Below this place and on the slope near the river there are three good fields in all, about fifteen acres, principally oats.

"Crow Shoe": new small field, one acre, roots. "Eagle Flies": small field, potatoes and garden. On the opposite side of the river is "Prairie Chicken's" camp, three houses in all, "Big Swan's" son-in-law and two old women and "Prairie Chicken" occupy them. Lower down the river there are "Wolf Robe's" house and "Bull Plume" and his son-in-law's, and at the farthest end "Potts" and "Senekin's" houses and fields. Houses have shingled roofs and are painted. "Strong Buffalo," house near St. Paul's Mission buildings, a nice place. This man had been in England the past winter with Rev. Mr. Hinchcliffe. The house has a lean-to kitchen and is well supplied with pots, pans and a fine cook-stove. The main part of the house is divided into two, a parlour and a bed-room, in which are two beds, with quilts, pillows and sheets all perfectly clean. Walls covered with pictures and mottoes, wooden floor throughout. Box stand in parlour. Cupboard in which china cups and saucers, bowls and plates and a plated silver tea set purchased in England, were noticed. Tables, chairs, pictures, mirrors, rocking chairs, lamps, clocks, rag carpet on floor, two pictures of the Queen in conspicuous places, and the motto "The Wages of Sin is Death, but the Gift of God is Eternal Life Through Our Lord Jesus Christ." This motto was worked in cloth in coloured letters. "Strong Buffalo" took pains in showing his travelling grip and in showing Windsor Castle and Parliament buildings and other noted places in England that he had seen. I asked him if he was not proud of being a British subject. He assented most heartily.

Four other houses in this place; in one a sick boy and a young girl, cared for by an old woman. The place was comfortless as compared with the house we had left, but most of the things had been removed to the lodge which was close at hand. Miss Brown, matron of St. Paul's Home, and who is ever kind to the Indians and especially to the sick, was looking after this boy and girl, and supplying them with various comforts of one kind and another.

At upper end of the reserve, Mangan has a field of two and a half acres, good house, and new stable and corral. Big Weasel and the two Mrs. Turipees had good houses and a pretty field in common. The field had been rolled, and the crop was looking promising.

Big-bull, up the river: new house, well built, good stable and corral; logs on ground for another house, cow-stable and shed. This is a new place and a pretty spot, and the man is enterprising.

Muggins had two houses and field, three and a half acres, oats and roots. Wolf-tail and War-bonnet had logs on ground for new houses. Above this place is a small village of three houses and a new one building, and logs on ground for two more. A field of four acres, oats and root crops. Some of the new houses will have two rooms in them.

Many-chief's is the farthest up place, and it is in its usual good shape. One new house completed since my last visit; also a fine cattle-shed. About 100 logs were used in building these. Has a large number of horses—I should fancy at least 200, and nearly 50 head of cattle. Place was clean all around; house well

furnished, a new iron bedstead with brass mountings, and two other factory-made bedsteads; cooking-stove, shining brightly; a good clock; a lot of kitchen granite-ware, including bread-pans. Many of the Indians here bake bread. Many-chiefs keeps a hired man to help him in looking after the cattle. Has a tool-house, buys all his own tools, and keeps them under lock and key; has a good root-house. The corral is about eight and a half feet high, and each panel has 11 to 12 strong rails. Has two fields, one on bottom and one on bench. This is a comfortable and thriving-looking place. The old man has three wives; the children were clean and neatly dressed.

Crow village contains 12 houses. The Roman Catholic mission school is here—a neat little building, painted; also painted fence around the entire property. The other houses were all in good order. One good field in common, principally potatoes and garden stuff.

Otter Above village: Crow Flag has a double house and kitchen, and bedrooms, has a nice new dairy built of logs and rails. It was clean. Shelving for holding milk pans, and cotton was placed over the shelving to keep the dust from falling into the milk. There were seven pans full of milk and a new dash churn purchased by himself, milk strainer and milking pails, and a thermometer for testing the temperature. Makes butter. Has a good garden and field, good stable and corrals for hay and cattle. Wash boards, tubs, coffee-mill and a full bag of flour was in one corner. Box stand in bed-room, three lamps and three bedsteads. This is a new place and is nicely located, and had a thriving look about it, and to my mind showed advancement. And this was only one of many such places. "Little Leaf," new village, four houses, three stables and one shed. Bob-sleighs, home-made, were noticed here. Logs were seen at many points for new houses and stables. Ploughs, mowers and rakes were under cover. "Sitting on Water," new stable and corral. North Bend: this is where the farm-house is situated. Cox's new house was being built. Walls were up and lumber on hand to complete. A good stable had been completed. This is a pretty spot and it is central for this end of the reserve. "Commodore's" house is on the opposite side of the river. Two rooms, kitchen and bed-room, good field of oats and potatoes. Three other houses here. "Pretty Face" has a good house, two rooms, well furnished, cook-stove, chairs, beds, modern floor and ceiling, cotton on walls. Good stables, one for older cattle and one for calves. Logs on ground for a cattle shed. Milk house. A good spring in the brush near the house. Good field of potatoes. A pretty place. "Crow Eagle," chief, is building a new house. Has a good field of ten acres between him and Chas. Crow Eagle. "Plenty Robes" has a good house and a field of four acres. "Bad Boy" has a new house in course of construction, and a field of four acres. I found the Indians anxious to have cattle. They are all taking great pains in having comfortable stables and sheds, and I could notice an improvement all along the line. The crop put in in 1894 was:—oats, 73 acres; barley, 13 acres; potatoes, 13 acres; turnips and garden, 21 acres; total, 120 acres, being 36 more acres than the previous year. The crop put in this year, 1895, was:— oats, 86 acres; potatoes and turnips, 17½ acres; garden, 4 acres; total 107½ acres, being 12½ acres less than in 1894. Home farm had 5 acres oats and 2½ acres potatoes and one acre garden stuff. New breaking 1894, 12 acres; summer-fallowing, 7 acres.

Hay put up, Indian, 292 tons; agency, 55 tons; total, 347 tons. New breaking, 1895, 16 acres; fallowing not yet done at time of inspection. Crop harvested, 1894: oats, 292 bushels; barley, 65 bushels; potatoes, 780 bushels. Produce of gardens chiefly consumed during season, but a good many turnips and onions were put away for winter use and for sale. The beef supplied was of good quality, and was well butchered, and great care taken in issuing.

The cattle were in good condition, being fat and sleek. The pasturage was of the best, and always fresh running water, easily obtained. The herd numbers: oxen, 30; bulls, 11; cows, 285; steers, 164; heifers, 211; bull calves, 89; heifer calves, 78; total, 868. The balance last year was 435. A year ago 435 head of cattle were held by 44 heads of families. This year the number is 868, held by 74 heads of families, showing a gratifying increase in the interest these Indians are taking in cattle.

The private earnings of the band were $1,459.31, exclusive of what they realized from cattle sold. One kiln of lime had been burnt, yielding 85 bushels. A number of good ox yokes, hay racks, bob-sleighs, &c., were made by the Indians. About 20 new houses and stables had been built during the year. The births were 34, and deaths 35, from 1st May, 1894, to 30th June, 1895. Number of Indians paid last treaty, 771. The health of the Indians at the time was good. The rations are issued three times a week, and average about a pound and one-eighth of beef and a little over half a pound of flour a day to each person, young and old. The office work, and issuing, and care of warehouse were well attended to by Mr. Maxfield, who is accurate and prompt in all his work. Books were written up to date. The beef register was carefully examined and found correct. The Roman Catholic mission was visited. The garden here was nicely laid out, and it was by far the neatest garden in the agency.

Fifty ponies had been exchanged for heifers. About fifty of the band were at the time working at the timber limits, cutting logs and rails.

The following were cut and hauled to the reserve during the year: house logs, 2,358; stable logs, 1,574; posts for fences, 2,400; rails for fences and corrals, 9,820; total pieces, 16,152. Some of these are still unused. I found piles of them at many points on the reserve. Mr. Smith, farmer, had made a very good potato cultivator out of old condemned machinery, and it is one of the best of the kind I had seen. It works on both sides of the drill, weeding and moulding, and can be shifted at will. The wheels are from an old sulky plough; it has a pole and is drawn by two horses. I have pleasure in stating that my inspection was a satisfactory one. I found the Indians contented and agreeable, not one word of complaint was uttered, nor did they ask for anything, but seemed perfectly satisfied. They were all working well. The staff, also, I found were performing their duties in a business-like way.

Mr. Cox was doing excellent work at the upper end, as can be seen from the nice new fields, houses and corrals, and he had shown many of the Indians how to bake bread and make butter. Mr. Smith is doing equally as well at the lower end, and is very handy with machinery. The interpreter, Mr. Dunbar, is a handy man, is a good carpenter, and takes a share in any kind of work going on, such as haying. The clerk, Mr. Maxfield, is a clever young man, and I have always found him thoroughly reliable. He attends to the office, warehouse, and the issuing; he is popular with the Indians, speaks their language very well, and altogether is a valuable assistant to Mr. Nash. The agent is energetic and hard-working, and he performs his duties with good judgment, and he is respected by his Indians as well as by his staff. That the agency as a whole is making rapid progress under his management there is abundant proof.

The St. Peter's Home was inspected on 28th June. The staff consists of Rev. Mr. Hincheliffe, principal; Miss Brown, matron; Miss Mason, assistant matron; J. A. Mason, teacher; Mr. Brighton, carpenter; Mrs. Brighton, housekeeper.

The buildings were much the same as at last inspection, and were in good order. A new carpenter shop had been put up. Two boys, James Knowlton and Jack, were working at this trade, and were doing very well. Part of the carpenter shop was being fitted up for a knitting machine, which had just been received. There was a stable, hay shed and corral; water-closets for boys and for girls; boys' and girls' play-grounds, a good swing for the boys. The main building I described last year. Boys' dormitory had 19 new iron bedsteads, supplied during the year in place of the wooden ones formerly used; toilet sets for each bed; the room was in perfect order, clean and well lighted.

Dining-room contained three large tables, two cupboards for dishes—a comfortable and cheerful room. Kitchen contained a large cooking range, and all was clean and in good order. Wire fly-covers for dishes were noticed.

Girls' dormitory contained nine iron bedsteads; large drum heater; rag carpet on floor. Each bed had two quilts, blanket, and two sheets, pillows, and palliasse. Boys' beds the same. The walls were covered with mottoes, Christmas cards, and pictures. There were to each bed a toilet set, towels, basin, and looking-glass.

This was one of the cosiest rooms one could wish for, and reflected credit on Miss Brown and the little girls.

The girls do patching, mending, and make boys' shirts. Boys do the baking, wash dishes, do sweeping, besides outside work: cutting wood and attending to the stable and garden. The girls do the scrubbing and washing, and knit cuffs, mats, scarfs, and stockings. A large picture of the Queen was in the girls' dormitory, and there was a very handsome hanging lamp.

The boys and girls have to take baths regularly. Boys bathe in the river also, but are then always accompanied by some of the staff. With the exception of two of the older ones, all the boys have their hair cut short, which made them look neat and smart, with their Jersey suits. I noticed that their footwear was also very good. The old mission building had been sheeted over with dressed lumber and tar paper, which added very much to the comfort of the place. The school-room was in good shape, but it is too small, and from the low ceiling the ventilation is defective.

A new church was about being commenced; it will be half way between the mission and agency building, and was expected to be ready for opening in September.

There is a good magic lantern in the school, also an organ. The new knitting-machine was doing good work, but of course hand-knitting is not overlooked, as this will be of more use to the girls as they grow up than the use of a machine.

There was a good deal of sickness in the home during the past winter. One death, that of a little girl, occurred in the building, and four pupils died at their own homes. The number of pupils in the home was 23 (boys 17, girls 6). Two boys were absent on leave at the time of inspection. The home is very well conducted, and the fullest justice was being done in every way to the pupils. The staff, one and all, are much interested in the work. Miss Brown, who is the pioneer at this kind of work in Treaty 7, having commenced, as I remember, at the North Reserve, Blackfoot Agency, the first boarding-school, with three little girls, must feel proud now to see the flourishing boarding schools, the result of her humble efforts, at North and South Blackfeet, Bloods, Sarcees, and Piegans.

Miss Brown told me that one little girl, whose parents reside a short distance from the house, asks leave occasionally to go home to fix up her mother's house. Miss Mason told me also that another little girl, who is proficient at baking, asks to go home for an hour or so, to bake buns for her mother. These are little things in themselves, but they show that the training these children receive is turned to good account. The work of the school-room will appear in a separate report. The pupils sing very nicely. The proceedings of the day closed by singing in good style, "God Save the Queen." I was much pleased with my visit, and would like to see the buildings painted, so that the outside of the place would correspond with the neatness of the inside. There is a tower and bell. The children were happy and cheerful, and seemed to be perfectly contented. Mr. and Mrs. Nash, I may say, take a warm interest in this school and are ever ready and willing to render assistance when required.

This completed my inspection of Treaties 6 and 7, and I returned to Regina' arriving there on the 6th July, and on the 15th of the same month I left Regina for Touchwood, arriving there on the 17th, and commenced my inspection of

Touchwood Agency.

This agency had not been inspected for 26 months, and the last time I was here was in 1889.

Mr. J. P. Wright, agent; Mr. H. A. Carruthers, clerk; George McNab, teamster and interpreter.

The agency buildings were all in good order. One hundred and fifty acres had been fenced in during the year for pasturage for agency stock. The agent had a very good garden, and crop of vegetables was looking very well. Mr. Carruthers had also a very good garden and was the first who had cauliflowers, cucumbers, corn and new potatoes, pease, beans, etc.

An implement shed had been put up alongside of the warehouse, since last inspection by Mr. Wadsworth. It is 40 x 16, frame and shingled roof. A milk-house at one end and a small ice-house adjoins. The clerk's house had an addition made of a lean-to 15 x 16. The old root-house had fallen into ruins, and would have to be rebuilt before any use could be made of it. The first reserve visited was

Muscowequan's, No. 85, on Farm 6 B,

Wm. Lambert, farmer in charge, and Tom Greene, a treaty boy, as assistant and interpreter. I cannot say that I found much, if any, difference in the appearance of this reserve compared with what it was six years ago. Almost the same fields in crop. Same stables, and with one exception the same houses. The fences, however, were good and showed that they had been renewed and repaired. Seven ploughs were at work breaking up new land for new fields for next year. Five of the band were breaking ten acres each and one would have fifteen, making sixty-five in all, and the whole was very nearly completed. These new fields are about two miles east of the present farm buildings.

The proposed new farm-house will be located near this place, the lumber for which was all on hand. The old farm buildings were in good order, and good care seemed to be taken of implements and tools, all being under cover. Some of the Indians had logs cut to build new houses near their new fields, also new stables, and fencing would be put up next spring. The crop put in in 1893 was: 41½ acres, yielding 113 bushels of wheat, 162 bushels oats, 164 of barley, 40 of potatoes and 150 of turnips; hay stacked, 350 tons. The crop of 1894 put in was 41½ acres, and no return reported. Hay stacked, 175 tons. The crop put in this year, 1895, was: wheat, 4; oats, 34½; barley, 5; potatoes, 8½; turnips, 4; onions, 1; carrots, 2; gardens, 2; total, 61 acres.

The prospects for hay were good and there would be no difficulty in procuring all that would be required.

Mahiganes, or Francis Joseph, had a field of 5 acres of oats, wheat, potatoes, and turnips; good fence, and was breaking 10 more acres; has 16 head of cattle; is going to build a new house; his garden was fairly well weeded, and he promised to attend to it; visited his lodge, saw his wife's mother, who is over 100 years of age, and is blind. This man attended to the burning of a kiln of lime, 250 bushels, and the lime was ready to be taken out.

Apatas-a-monie had a field of about 7 acres of oats, looking fairly well, but all the fields here were old ones, and were more or less weedy. Garden was in better shape in this respect.

Henry Bear had a pretty field of 18 acres of oats and barley, looking very well, and should give a good return. A very good garden of potatoes, turnips, carrots, beets, onions, corn, lettuce, cucumbers, &c., and very well attended to. Good fences; has a good house built since I was here in 1889. I remember the walls were up then. It has upstairs rooms. On one end of the house is a carpenter-bench—this Indian is a carpenter. Thatched roof; box-stove, tables, bedsteads, and all very clean. Makes butter; milk-pans were noticed; has a good well; stable has three divisions, and is the same as when I was here last. Good gates at entrance to house and garden—altogether a comfortable and thrifty farm homestead, and, if nothing happens to destroy the crop, this man will be well rewarded for his industry. House whitewashed outside and in. Two other families on this reserve besides Bear make butter.

Pierre Desjardins had a field of 5 acres of oats, potatoes, and garden stuff. Has a good house, new cook-stove, beds and tables, good stable and corral; is going to build another house at the mountain, where he proposes wintering his cattle, hay being plentiful there.

John Desjardins: A neat little house, mudded, but not whitewashed. I visited the chief in his lodge; also Moise, and found both lodges very cleanly kept. Some women were washing.

A few more lodges and fields were visited. Mrs. Greene: A small field of 3 acres, wheat and barley. The whole reserve was looking at its best, the late rains having made everything grow most luxuriantly, and the weeds particularly so. The cattle were in fine order, they could not have been otherwise from the fine pasturage; nearly all were on view. The herd now numbers 115 head, held by 11 heads of families, names of whom were sent with the returns. The number on hand at inspection, 30th April, 1893, was 65.

In private stock the band has 42 horses, 2 oxen, 2 cows, 2 heifers, and 2 heifer calves. The farmer has one horse. Before going on to next point I would notice that, although this reserve has been somewhat slow in the past, there were signs of more activity now to be seen. Mr. Lambert had not been long at work among Indians, and therefore not much experienced, but he is young and active, and under the energetic supervision of the agent there was every reason to believe that another year would show marked progress on the reserve. The usual inventory was taken.

The boarding-school was inspected on 20th July; F. Dennehy, teacher and manager; Miss Lapierre, matron.

The number of pupils on the roll was 25 (boarders, 20; day pupils, 5), all belonging to this reserve, but one from Day Star's. There were 22 present on 20th July (boys 11, girls 11). Some good specimens of industrial work were noticed, in sewing and knitting, and more had been sent to the fair in Regina.

Trowsers, stockings, coats, dresses, in fact all clothing for the boys and girls is made in the school. The dining-room had three tables, space rather cramped for the number of pupils. Boys' dormitory contained eight iron beds. Each bed had a blanket, quilt, and pillow; palliasse is added in winter. No sheets.

The girls' dormitory had six beds furnished same as the boys'. Two pupils occupied one bed. The rooms were clean, but in many places the plaster had fallen off, which gave the place an untidy appearance, but Mr. Dennehy informed me that, as they expected a new building very soon, it was not intended to spend any money fixing up the old one. The new building will be a stone one, near the mission church. There was a good garden of two acres, and the usual assortment of vegetables looked very well, and the garden had been well weeded. The buildings besides the school were a store-house, horse and cattle stables. There were 10 cows, 5 horses, 3 pigs, and 2 calves. Butter is regularly made for the use of the house. The whole place was inclosed by a good fence, and the buildings were whitewashed.

The school part of the work does not come under my inspection, but from what I could notice I believed Mr. Dennehy is doing good service among these pupils. I inclosed specimens of their writing to the commissioner. Should the new building not be ready for the winter, the old building will need a lot of repairs before it could be comfortably occupied another winter.

Poor-man's Reserve, No. 88,

or Farm 6*a*, was next reached. Edward Stanley, farmer in charge, and also of Day Star's, No. 87, and Chas. Favel, assistant and interpreter.

The farm-house had a lean-to kitchen added during the year. The old stable had been pulled down, and a new one built. The walls that were up for a granary in 1889 were in the same condition, except a covering of rails and straw, and the place was used for storing implements. It was proposed to have it covered this year with a shingle roof. Walls are up for a little office. A new implement shed, 44 x 14, had been put up by Mr. Stanley, assisted by Indians. It is log, with rail and turf covering, and was almost completed. Horse and cow-stable built in 1894, roof not quite completed; good corrals; good gates at entrance, and these are easily opened and shut, as they work on the hubs of old cart-wheels. The farmer had a very nice garden, and a good showing of all kinds of vegetables—a good pattern for the Indians, being so neatly arranged and well kept.

The farmer had a field of oats on shares with the chief, of 10 acres, also a small field of his own of 2 acres—oats and few potatoes. I noticed an improvement on this reserve more particularly in a better class of houses and better stables and good gardens. The fields were all more or less weedy. Mr. Stanley had the Indian women busy working, pulling the weeds up by the roots, and piles of these could be seen all along; this method could, of course, only be followed in the case of gardens, potatoes and turnips, and was the most effectual way of coping with these troublesome pests. The garden and root crops looked well, and there was every appearance of a good yield. The wheat and oats looked at the time fairly well. The Indians were chiefly living in lodges, and I visited a number of them and generally found them clean and comfortable. Of course they move from place to place, so that dirt had not long time to accumulate. The houses had been left in a cleanly state, and all rubbish burnt up. The houses had all been whitewashed.

"Young Tobacco" has a good field of 7 acres of wheat, fences straight and strongly made; crop looking fairly well; garden near chief's field, of quarter of an acre, and it was very free from weeds. Chief has a fair house, but is building two new ones, one 22 x 20 and one 12 x 16; new stables built in 1894, two for cattle and one for horses; has 14 head in all; has a good well and plenty of water at a depth of 22 feet; good garden and well weeded; field of oats on shares with farmer, and a large portion of same field was being summer-fallowed. The chief had a nice dairy in 1889, but he gave up keeping it two years ago, and was to commence making butter again when he got into his new house. Wm. Favel has a good new house, shingled roof, log, up-stair rooms, good floors and stair-case, cook-stove, tables, chairs, children's chair, sewing machine, clocks, pictures, lamps, table covers and cupboard, with a good supply of dishes and kitchen utensils. House has three windows down-stairs and curtains, two windows up-stairs. Has a private wagon and set of double harness, mower and rake, 3 horses, 1 pony and 22 head of cattle. Has a good garden, potatoes, turnips, carrots, cabbages, corn, beans, and all looking well, being free of weeds; one stable built in 1894 with 24 stanchions, also a cattle shed and corral, a second stable with 20 stanchions, ox stable for 5 head, horse stable for 4; has a field of 5½ acres, and some summer-fallowing was being done, about 6 acres. The school-house is near here, closed, but appeared to be in fair condition. There was a field of 20 acres in common which was being summer-fallowed to endeavour to kill the mustard weed which had completely overrun it.

"Fox" had a good, clean house; new stables, upright poles instead of stanchions; 6 acres of wheat, looking fairly well; good garden, potatoes and vegetables; had logs on ground for a new house.

"Worms" and "Jim" built a new stable in 1894, good doors and strap-hinges; house and cattle-shed and corrals. The stable is a double one, and the cattle are fed from a passage up the centre; stanchions on one side; a good well, with six feet of water in it. Both have good houses, closed, but left in a cleanly state both inside and around outside; 4½ acres of wheat, looking very well; good garden, well weeded; logs were on ground for more buildings.

Eswewin: small house and new stable, built in 1894. Has 10 head of stock; 4-acre field in wheat; walls were up for a new house, roof still to be put on; neat place and clean.

Tah-pe-quan: new house, built in fall of 1894; square logs, thatched roof, wooden floor. Old Tobacco: neat house and good stable for 12 head; good garden, well cared-for.

Chief Poor-man's mother was living in a lodge. The old lady is blind, but was working away making mats, and it was wonderful how neatly she was doing the work. I found many of the other women making mats, and some pretty ones were to be seen. One field of 10½ acres in wheat; breaking and summer-fallowing were noticed. The wheat was good on both sides of the field, but poor in the centre, the wind having blown the seed off.

The crop put in in 1893 was 46½ acres, yielding 370 bushels of wheat, 30 of barley, 162 of potatoes, 90 of turnips, 75 of carrots and onions. Of hay, 520 tons were stacked.

In 1894 the crop put in was 62½ acres, and there were harvested 35 bushels of potatoes, and hay stacked 470 tons. The crop put in this year, 1895, is as follows: wheat, 36 acres; oats, 13½ acres; potatoes, 12 acres; turnips, 4½; gardens, 3¼ acres; being a total of 69¼ acres.

The cattle were in splendid condition. The herd numbers 122 head, all properly branded. The number on hand 30th April, 1893, was 96. The 122 head are held by 15 families. In private stock the band has 39 horses.

Since last inspection, in 1893, five new houses have been completed, and two not quite completed. Three have been repaired by raising the roofs, and a number of old houses and stables have been pulled down and rebuilt. Three wells have been dug; a number of logs cut and hauled to the reserve; 60 acres of fencing done; 7 pairs of bob-sleighs, 18 jumpers, fork and axe-handles, hay-racks, ox-yokes, &c., have been made by the Indians. There are 11 children of school age on this reserve, attending no school.

An inventory was taken of all property in hands of farmer, and his books checked since April, 1893. I found Mr. Stanley active and much interested in his work, and he does not spare himself in order to advance the interests of his Indians. He was doing his work in a most satisfactory manner, and Mrs. Stanley keeps her house in a way calculated to have a good influence on Indians visiting the farmer. I may say the same of all the farm-houses in this agency, and I consider this of importance, as Indians can be trained to habits of neatness more by example than by preaching to them. The agent, Mr. Wright, accompanied me in all my visits, and although only a short time in charge of this agency he seemed as familiar with the work of each Indian as the farmer himself. A kiln of 500 bushels of lime was under way at the time, the Indians themselves attending to the burning.

Day Star's, No. 87,

was next visited. This reserve is also under Mr. Stanley, but Favel, his assistant, lives here. The houses and stables on this reserve are of a superior class. The gardens were in good shape. No grain was sown this year, but a field of 10 acres was being summer-fallowed for crop next year. Moosomay has a neat house, and a new lean-to kitchen added last year. All the houses here have thatched roofs, and had been whitewashed. Plain Buffalo had good house and a porch, 10 x 12. Three new stables, good fences and fire-guards ploughed around the premises. Two sets of bob-sleighs, made of birch-wood and ironed by themselves, were noticed. Garden in common, and well cared for. At the north-east corner of the reserve there is stabling for 80 head of cattle, and 4 houses for those in attendance. These stables were built in the fall of 1894. There is a good-sized lake and abundance of hay in the vicinity. A few more good houses and gardens were noticed. Five wells had been dug on this reserve, and plenty of water in three of them; two are on springs and never fail.

The farmhouse (Favel's) is a good one; there is a good store and ration house and a stable for four horses, shed for implements. These were all under cover. Hay fork handles, mats, ox yokes, sleigh runners, ox collars, jumpers, hay frames, bob-sleighs, wagon boxes, were to be seen, made by the Indians. A good well, 15 feet deep with 5 feet of water. A new kiln of lime; 400 bushels had been burnt. The crop put in, 1893, was: barley, 10 acres; roots or gardens, 6; total, 16 acres. Harvested: barley, 30 bushels; potatoes, 130 bushels; turnips, 185 bushels; carrots, 91 bushels; onions, 67; hay stacked, 417 tons. Crop put in in 1894 was: potatoes, 4 acres; gardens, 3 acres. Harvested: potatoes, 25 bushels; hay stacked, 508 tons. Crop put in this year, 1895: potatoes, 13 acres; turnips, 5 acres; gardens, 3 acres; total, 21 acres.

The herd is a fine one and the cattle were in the best of condition. The number is 198 head; the number 30th April, 1893, was 112. Six new houses have been built, since inspection of 1893, on this reserve, and one house not yet finished. Logs

were on the ground for three new houses. Twenty-three new stables had been built and nine old ones pulled down. Three wells were dug and water obtained, and two dug without getting water. Road cut from "Day Star's" to "Poorman's"—seven miles. Fencing large pasture of 2,000 acres, lake forming one side. A large and strongly built corral, capable of holding 250 head of cattle, had been put up, and an implement shed, 14 x 20. The reserve was in very good shape. The day school was visited and will appear in separate report. I would only mention here that the teacher, Mr. Williams, had one of the best gardens on the reserve. Mrs. Williams was doing excellent work among the Indian women, teaching them, as well as the pupils in the school, knitting, sewing and other duties connected with housekeeping. This work among the women is chiefly in winter time, when they are in their houses. A number of articles were sent from here to the fair in Regina, but it was scarcely the correct thing to place these little day schools in competition with industrial and boarding schools, where they have machines of all kinds for doing such work, but for hand knitting and sewing our day schools can hold their own even with the industrial. My next point was

Gordon's Reserve, No. 86,

or Farm 6*c*, T. Baker, farmer in charge.

The improvements on this reserve were very marked, especially in the well kept gardens, good fences and houses. I have no hesitation in saying that they were the best lot of gardens I had seen anywhere—not one good one here and there, but all were good and were a credit to the Indians and to Mr. Baker, the farmer. They were thoroughly free from weeds, and crops were looking magnificent. The Indians had been using new potatoes for some time. The fields of grain were looking fairly well, but the fields are old and were weedy. A brush plough having been sent in, new fields would be started, so that the old ones could be fallowed to get rid of the weeds. The farm-house is a good one; an outside kitchen had been added in 1894, painted and inclosed with a neat picket fence. The old well was of no use, and a new one dug twenty feet gives a plentiful supply of water. A new horse stable had been built in place of the one burnt by a prairie fire. The stable is a good one, and has two windows and a hay loft; it is frame. There is the granary and ration-house and a small store-house, all in the best of order, not a particle of dirt could be discovered lying around.

Mr. Baker has a very fine garden, in which I noticed carrots, onions, beets (very fine ones), parsnips, rhubarb, lettuce, pease, beans, turnips, cabbage, parsely, cauliflowers, cucumbers, citrons, vegetable marrows, celery and, of course, potatoes, all looking very well. Many of the Indians' gardens were just as good, perhaps not quite such a variety, but otherwise just as well cared for. I can only refer to a few of the places. Kissipass and son had two houses; closed stable with three divisions. John Anderson has a nice field of about 12 acres in all, wheat and oats, looking very well and should give a good yield. Good house, and a neat little plot in front with a fancy willow border around the walks, which were covered with gravel, all showing good taste. Piles of lumber and shingles were on hand to put a new roof on the house. A good cattle stable, but his cattle had to be wintered at some distance from the reserve, owing to the hay having been burnt by a prairie fire. The house contained cook-stove, cupboard with dishes, two tables, bedsteads, child's chair, other chairs, lamps, washstand, washtubs, pictures, curtains on windows, clock, all clean and neat, ornamental fence in front of house. Comfortable looking place. Thos. McNab: very good garden and good fence. House divided into two apartments; newly scrubbed; box and cook-stoves, two bedsteads, patched home-made quilts, tables with red table-covers. Martha, one of his daughters, who had been for some years at the "home," was now with her parents, as her mother wanted her to help in the house-work. Open chimney in one room, sewing-machine, silver-plated kettle, mirrors. Square log stable built in 1893; stanchions, slab floor, good doors

with strap hinges; good corral; thrifty-looking place. Has two girls and a boy still at the school. Cattle will be sent off the reserve for the winter where hay and water would be plentiful.

Josiah Pratt has a nice place; good house with sitting, bed-rooms and kitchen and upstair rooms. House comfortably furnished and very clean and tidy; clock, sofa, curtains and pictures, walls inside lathed and plastered. Good field of wheat and a very fine garden; potatoes and turnips were looking particularly promising, the latter were too thick, but Mr. Pratt thought it was waste to pull any out. The agent and myself told him otherwise, and he finally consented to make a trial, and then and there thinned a couple of rows as an experiment, to see which would do the best, the drills thinned or those unthinned. This man is above the average in intelligence, being a lay-reader in the English church, and I just mention this to show how difficult it is to get them to do this thinning of roots. Has a good horse stable for 6 horses; has some fine specimens of pigs; cattle stable for 16 head of cattle; racks on both sides for feeding, square logs, slab floor, good doors with strap hinges; a calf stable. All these stables have been built since 1893. Has poultry, also turkeys and geese; 26 head of cattle; a thrifty and industrious farm homestead and would put many a white farmer's place to shame. John Cochrane has also a good house with upstairs rooms. Houses all whitewashed here, outside and in. Good house and cattle stable; has 16 head of cattle, with stalls for each; hay loft over stable. A very fine garden; vegetables, turnips, onions and carrots in this as in all the gardens, sown in drills and looking very neat. Joe Iron Quill, A. McNab, Paschal, John Seers, White Beaver, Henry Bird and Fisher, had all similar places.

Day Bird has a nice house built in 1893, three beds, lounge, settee, tables, cook and box stoves, lean-to kitchen, upstairs rooms. A fair indication of the progress this band has made is well illustrated by the different houses built by this man. First house was a shack, flat mud roof 8 x 10, second house, 12 x 14, sloped roof of rails and sod, third house or third step of advancement, is 18 x 22, one and a half story, thatched roof and a lean-to kitchen. These three houses are to be seen; one of the old houses is used as a stable and one for storing tools and implements.

The Gordon family (late chief) have a very good house, built in 1893. Good garden, well weeded. The older houses are used partly as dwellings by other members of the family and one is used as a store-house. The stables were roomy and comfortable, manure piles, which had been allowed to accumulate for years, had been hauled out to the fields and would be completed this fall. The English church on this reserve has been completed since I was here last, and the band put it up themselves, having received very little aid from outsiders. Mr. Baker was deserving of credit for his active and constant care in having the gardens in such good shape. The Indians themselves would soon see that it pays better to have a good garden than a slovenly one, and it must be a benefit to their general health to have not only potatoes, but turnips, onions, carrots, beets and cabbages for winter use. Unless in special circumstances there is no reason why any Indian should be without a supply of these; in one sense they are more important than a supply of flour. One thing particularly noticed here was the straight fences as compared with unseemly, crooked and irregular ones formerly in use.

The crop put in here in 1893 was 107 acres, yielding 527 bushels of wheat, 646 of oats, 142 of barley, 282 of potatoes, 180 of turnips, 100 bushels of carrots, 47 of onions; hay stacked, 600 tons. In 1894 the crop put in was 106 acres, yielding 50 bushels of wheat, 120 of potatoes, 75 of turnips, 34 of carrots and 18 of onions; hay stacked, 800 tons. The crop put in this year, 1895, was: wheat, 59 acres; oats, 17 acres; potatoes, 8 acres; turnips, 1½ acres; carrots, 1½ acres; onions, 1½; total, 88½ acres.

The herd on this reserve is a particularly fine one, and numbers 254 head, held by 25 families, from 2 to 26 each, as per list of names sent with return. The annual inventory of property in hands of farmer was taken, and his books examined. Mr. Baker is doing splendid work on this reserve, and has everything in good shape. He is thoroughly wrapped up in his work, and gets along nicely with his Indians.

Three new milk-houses had been built during the year; a number of families make butter, and others use the milk only. Cheese was to be made this fall and samples sent to Regina. Lime is burnt; one kiln this summer of 400 bushels. Two new houses and two new stables were put up this year; 100 acres of new fencing made; 40 acres of summer-fallowing was being done. Fork and axe handles, bob-sleighs, whippletrees, neck yokes, ox yokes, baskets, mats, bead-work, moccasins, form some of the industries of the band. Some had poultry, and about 50 hens are held by a few families. Eight families milk cows and make butter. The turnips, carrots and onions were all in drills. The carrots measured in drills 10,030 yards, and onions 5,692 yards. The boarding school was inspected on 25th July. The number on the roll was 26—21 boarders and 5 day scholars. Number present on the 25th, 20 (boys, 12; girls, 8). The staff consists of:—

Rev. Mr. Owens, principal.

Rev. Mr. Lallemand, assistant principal and teacher.

Mrs. Owens, matron.

Miss Chapman, assistant matron.

Flora McNab, a former pupil, laundress and general house servant.

The school-room was clean, airy and well arranged. Kitchen and dining-room were in good order. The boys' dormitory was a comfortable place; it contained 10 double factory-made bedsteads, each had a quilt, two blankets, and pillows, but no sheets. The teacher also had his bed in this room. Girls' dormitory had four double wooden bedsteads, furnished same as boys', and in another small room there was one bed; washbasins and towels in each place. As I have said, the bedsteads are double wooden ones, and I suggested that single iron ones should be substituted before going into the new building. There was a store-room well filled with dry goods, and Mr. Owens informed me that the friends in Montreal to whom I wrote in 1886 for help in the way of clothing had continued to send supplies ever since. I may say that one of these was A. F. Gault, Esq., of Gault Bros., Montreal, and when I met him afterwards he thanked me for giving him and others at that time the opportunity of helping so deserving a cause. Some industrial work done by the pupils was shown, and more had been sent to the Regina Fair. The mission garden was a very good one, about two acres, and well fenced, and there would be raised ample supplies of all kinds for the use of the house. The pupils were clean, well dressed, bright and happy-looking, and most satisfactory work was being done by Rev. Mr. Lallemand, the teacher.

The new building was fast approaching completion. The inside plastering was, at the time, going on. The building is solid stone, 42 x 48, cottage style. On the ground floor there are two rooms, each 14 x 16, and a hall of seven feet; work-room 14 x 16, and a dining-room 31 x 14; class-room 30½ x 15. Lavatory and stair to boys' dormitory. The basement contains a second dining-room, 38 x 14; kitchen, 14 x 30; pantry, 14 x 8; dairy and store-room, 38 x 14. Up-stairs there are three bed-rooms and bath rooms; boys' dormitory, 38 x 15, five windows and three ventilators in the ceiling; girls' dormitory, 28 x 15, four windows and three ventilators. Attic is all in one; roof painted red; the ceiling in basement is eight feet; first or ground floor 9.4, and second flat 9 feet. The building is to be heated by stoves. When it is occupied, the old premises will be used partly as a store-room and laundry, and a portion as a sick ward.

The contrast between the appearance of this new building and what the school was in 1886, was striking. At that time there was just the school-room, and Mr. Owens, teacher, lived up-stairs, and the pupils, when I visited the schools in November, 1886, were poorly clad and some were barefooted. Now they have, or will soon have, a fine stone building, and they are all comfortably and neatly dressed, and this applies to the children at the houses as well as those in the home.

The Indians killed for private use, but not paid for by the department, during winters of 1893-4 and 1894-5, 39 cows, 1 heifer, 7 oxen and 22 steers, or a total of 69 head.

The total number of cattle held by the various bands, 30th September, 1889, was 387; total number 30th June, 1895, 699; showing an increase of 312.

The private earnings of the band during the year ended 30th June, 1895, were:—

Day Star's,	fur, $100;	other industries,	$ 587.....	$	687
Poor Man's,	" 150;	" "	579.....		729
Gordon's,	" 250;	" "	1,399.....		1,649
Muscowequan"	200;	" "	453.....		653
Yellow Quill,	" 6,500;	" "	50.		6,550
Total.....					$10,268

The births, exclusive of Nut Lake Band, from 30th June, 1894, to 30th June, 1895, were 13, and the deaths during the same period were 14. The population and religious faiths of the bands are as follows:—

	Ch. of Eng.	R. C.	Pagans.	Totals.
Day Star's.....	77	4	.....	82
Poor Man's.....	88	9	.....	97
Gordon's.....	125	18	17	160
Muscowequan's.....	.....	76	66	142
Yellow Quill.....	.....	8	355	363
Totals.....	290	115	438	844

The flour was of choice quality, also the bacon. The usual inventory of the warehouse and articles in use was taken, and the books checked, since last inspection. The warehouse is well kept, and goods are neatly arranged. The office work is well done by Mr. Carruthers. The books were all written up to date, and no detail was overlooked, Mr. Carruthers being painstaking, careful, and correct in all his work.

The health of the Indians was good, the doctor not having been called in since last winter. I have pleasure in informing you that after being all over the reserves (except Nut Lake), I can safely say that all is in good shape. The farmers are good, reliable men, and are doing their work faithfully. This was the first time I had occasion to inspect Mr. Wright's work as agent, and I can speak in terms of praise as to the manner in which he performs his duties. He is active, careful, and methodical, and at the same time he is progressive, and I feel sure these Indians will make good progress under his management.

Detailed report, with inventories, returns, and statements, were forwarded to the commissioner, Regina. I now proceeded to Qu'Appelle to complete reports, and, finding that Mr. Wright was going to Nut Lake to make treaty payments, as this is the only opportunity of seeing these Indians, I proceeded to the agency and accompanied Mr. Wright and Dr. Hall to Nut Lake.

I left Qu'Appelle on 17th August, and agency on the 19th, arriving at the Indian Camp, Nut Lake, on the 20th. The Indians were in camp; there were 60 lodges in all, and four or five large tents of traders—Hudson Bay Company, Fisher, Foster, and Iredale. I visited all these, and the goods offering seemed to be of a good quality and of a useful kind, competition being keen. The Indians were getting the worth of their money. Very few trinkets were noticed. The payment passed off satisfactorily. These Indians are a fine-looking lot of men, and they seemed to be well-off in clothing, and some of them had splendid horses. They live entirely by hunting.

They have two reserves: No. 89, at Fishing Lake, 34·5 square miles; and No. 90, at Nut Lake, 16·6 square miles. A few families pass the winter at Fishing

Lake, and have 10 or 12 head of cattle, but no crop. Some hay had been cut. There are three small houses and some poor stables. Fish are plentiful in the lake. At Nut Lake there are only two houses, one occupied in winter by the chief, and one by his son. I saw only one small field that had been fenced—about one acre and a half; fences were broken and useless, and only weeds in field; no crop had been put in this year. The chief had some hay cut for his ponies.

A few of the band have places off the reserve, some eighty miles distant, and have 10 or 12 head of private cattle. There is no school or mission of any kind amongst these Indians. I believe one boy attends Qu'Appelle Industrial School. The land on both reserves is good, and there should be no difficulty in raising plenty of potatoes, and these with the fish always to be had in the lake, and what they can make at the hunt they can be comfortably off. The want of houses is felt, however, especially by the old people who cannot go on the hunting trips. There is plenty of timber to build houses. The number paid in 1884 was 431, and there were paid in 1895, men 64, women 88, boys 104, girls, 92, total 348. The births from payment in 1894 to 1895 were 14, and the deaths 22. If these Indians would therefore build houses and have gardens to raise potatoes and turnips, they would be better off than they are now. This would not interfere with the winter hunting and this is the only time that fur has any value. Dr. Hall visited every lodge, and a number came to our tent for treatment and medicine, and the doctor left some medicines with young Fisher, who resides on the border of the Nut Lake Reserve, to be given in certain cases according to instructions put on each bottle or package. I noticed that the doctor in going from lodge to lodge was very painstaking and they seemed to have entire confidence in his treatment. The lodges were of duck. Some of them were not so clean as they might have been, but the camp would be broken up shortly after we left.

I find that I have inspected since my last annual report 14 agencies, 54 reserves, 3 industrial schools, 9 boarding and 17 day schools. Mr. Martin was with me from October until April and he gave me the best of satisfaction.

I have the honour to be, sir,
Your obedient servant,
ALEX. McGIBBON,
Inspector of Indian Agencies and Reserves.

INDUSTRIAL SCHOOL,
BRANDON, 16th Sept., 1895.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of my inspection of Protestant Indian Schools in the North-west Territories, since my last annual report, which ended with Emmanuel College, Prince Albert, on 29th September, 1894.

Moose Woods Day School,

in connection with Methodist Church, was inspected on 18th October, 1894. Mrs. Tucker, teacher; number of pupils present, 13; number enrolled, 13; number of school age on reserve, 15. Attendance very regular; two in Standard I; three in Standard II; six in Standard III; and two in Standard IV.

School is part of the main building on teacher's dwelling, and was in good condition and school material was sufficient and well cared for. There is a bell mounted on a frame outside. The examination was satisfactory and proved that faithful work was being done.

The pupils were clean and neatly dressed. Knitting, sewing, baking, washing, house-work and making baskets were the industries; would make straw hats, but had no straw.

Battleford Agency.

Day school on Red Pheasant's Reserve, in connection with Church of England, was inspected 30th October, 1894; Mrs. Price, teacher; number of pupils present, 10; number enrolled, 18; number of school age on reserve, 19. Attendance fairly regular. Ten in Standard I; four in Standard II; and four in Standard III.

Building in good repair; had been whitewashed outside and in; school material sufficient; a few readers only having been asked for. Knitting socks, mitts and cuffs, sewing and crochet work were the industries.

The examination did not show any progress as having been made since last inspection.

Little Pine's Day School

was inspected on 2nd November, 1894. C. A. Lindsay, teacher. Number of pupils present, 14; number enrolled, 20; number of school age on reserve, 21; average attendance, 14. Fourteen in Standard I; six in Standard II. The building was in good condition and was comfortable; school material sufficient. Industries consisted of making baskets, also knitting and sewing. This school is in connection with the Church of England. The examination was satisfactory and fair progress was being made. Mr. Lindsay acts as lay-reader on the reserve also and is doing good work among these Indians, as well as in the school.

Thunderchild's Day School

was inspected on 6th November, 1894. C. T. Desmarais, teacher. Number of pupils present, 13; number enrolled, 17; number of school age on reserve, 26; number of teacher's own faith, 16; average attendance, 12. Eleven in Standard I; three in Standard II; three in Standard III. Building in good repair and school material plentiful. Industries are gardening and making baskets, knitting socks and mitts for themselves. The boys have had their hair cut short and looked clean and tidy. Chief Thunderchild was present and took quite an interest in the proceedings. Progress was satisfactory. School in connection with Church of England.

Moosomin's Day School

was inspected on 7th November, 1894, Mr. Donovan, teacher. Number of pupils present, 11; number enrolled, 12; number of school age on reserve, 14; of teacher's own faith, 9. Four in Standard I, two in Standard II, four in Standard III, two in Standard IV. The building was in good repair, and school material and equipment sufficient. The industries were knitting socks and mitts, and girls make their own dresses and shirts for the boys; boys knit their own socks. The school was in a satisfactory condition, and the pupils were getting along nicely under Mrs. Donovan's training. School in connection with Church of England. All the school houses in this agency have open chimneys, and are provided with water-closets for boys and girls.

Battleford Industrial School

was inspected on the 23rd and other days in November, 1894; Rev. Thomas Clarke principal; J. R. Neely, teacher of the boys, and Miss M. M. Smith, of the girls. Number of pupils on the roll, 102—boys, 56; girls, 46; classified as follows:—

	Boys.	Girls.
Standard I	17	8
" II	17	7
" III	11	8
" IV	6	16
" V	5	4
" VI		3
	56	46

The examination of the various classes showed carefulness on the part of Mr. Neely and Miss Smith, and signs of progress were not wanting. The discipline was very good in both departments. About thirty letters were inclosed with my report as specimens of the pupils' composition and also of their handwriting, some being very good indeed. I left the school feeling that the fullest justice was being done by Mr. Neely and Miss Smith. Further details of the general work of the school will be found in my report on agencies.

The institution is in connection with the Church of England.

School-rooms are roomy, airy and well lighted and ventilated, and equipment and material sufficient. The pupils were neatly dressed and seemed, both boys and girls, particular about their personal appearance.

Onion Lake Agency

Day and Boarding School was inspected on 27th December, 1894; Mrs. Matheson, teacher; Rev. Mr. Matheson, missionary. Number of treaty pupils present, 5; number on roll, 5; number of school age on the reserve, 52; of same faith as the teacher, 6. In addition to the above, 6 children attend—5 non-treaty, and one treaty under age, making a total of 11 who board in the building, but there is accommodation for 30.

Standard I	2	2
" II	1	2
" III	1	1
" IV	1	
	5	6

The new wing has been completed. School material was sufficient, a few books only having been asked for. The usual industries, knitting, sewing and house-work for the girls, who also make aprons for themselves, and shirts for the boys.

The boys do gardening, tanning hides, a little at carpentering, cutting wood and attending to the stable. The examination was satisfactory; Mrs. Matheson being an accomplished teacher; the pupils were doing very well. The mission is in connection with the Church of England.

SADDLE LAKE AGENCY.

Good Fish Lake Day School, was inspected on 11th January, 1895. Frederick Zorhorst, teacher. Number of pupils present, 27; number enrolled, 34; number of school age on reserve, 34. All of teacher's own faith, classified as under: 18 in

Standard I; 8 in Standard II; 2 in Standard III; 6 in Standard IV. The building was in perfect order and the school-room was decorated with evergreens, flags and mottoes for an entertainment which was to take place on the 17th, to consist of songs, recitations, etc., by the pupils. School material was sufficient, and the examination showed a marked progress over what it was last year. Rev. Mr. Glass, missionary at Whitefish Lake, takes the general oversight of the schools in this agency. The school is in connection with the Methodist Church. Knitting and sewing were the only industries, and these had been commenced since last inspection.

Whitefish Lake Day School

was inspected on 12th January, 1895. Miss Minnie J. Featherston, teacher. Number of pupils present, 10; number on roll, 18; number of school age on reserve, 18; of teacher's own faith, 17. Six in Standard I; 3 in Standard II; 3 in Standard III; 2 in Standard IV; and 3 in Standard V. The building was in excellent order, having been plastered and newly whitewashed outside and in, and the walls were decorated with evergreens, flags, and pictures. School material was sufficient, and well cared for. An entertainment took place in the school on 20th December, provided by Rev. Mr. and Mrs. Glass, and proved very enjoyable, and was much appreciated by the pupils and their parents. Singing, recitations, choruses, club-swinging, formed part of the exercises. The examination showed that good progress had been made, and that Miss Featherston was a worthy successor of the former teacher, Miss Whitelaw. The industries are shown by the following list: Edith Steinhauer, Peter Stamp, Susan Nenekeeteewap, Morley Steinhauer, Angeline Seenum, Emma Nenekeeteewap, Jean Apow, Amelia Sinclair, Harrison Steinhauer, Joshua Apow, Emma Stanley, Moodie Seenum, C. Seenum, Annie Bull and others making cuffs, mitts, socks and stockings, quilts, sewing, etc. A ventilator has been put in in place of an open chimney. School in connection with Methodist Church. Chief Pakan, Rev. Mr. Glass, and Agent Ross were present at the examination.

The day school on Hunter's Reserve was inspected on 16th January, 1895. A. G. McKitrick, teacher. Number of pupils present, 16; number enrolled, 21; of teacher's own faith, 18; average attendance, 13. Classified as follows:—

Standard I	19
" II	1
" III	1
	21

The building had been removed from the old place and was more central for the majority of the pupils. The building is fully described in my agency report. It is 23 x 32; ceiling sheeted with dressed lumber; six windows; one of the best log buildings we have. Church services are also held in this building, once a month by Rev. Mr. Glass and other Sundays by Mr. McKitrick, and the services are generally well attended. School material sufficient, a good part of it being supplied by the mission. The examination showed progress, and proved that Mr. McKitrick was a painstaking and competent teacher. The building is supplied with ventilators instead of an open chimney. Water-closets, boys' and girls', have been built at all the schools in this agency, and wood is regularly supplied by the parents. The industries consist of knitting and sewing. During the removal of the building the school was closed, and was re-opened on 26th November, since which time the attendance has been much better. Mr. McKitrick, assisted by the Indians and by Mr. Ross, agent, did all the work of taking down and re-building, and at the same time enlarging the school accommodation. The school is in connection with the Methodist Church.

Edmonton Agency.

The day school on White Whale Lake was inspected on 11th February, 1895. W. G. Blewitt, teacher; Rev. Mr. Somerset, missionary; number of pupils present, 20; number enrolled, 36; number of pupils of school age on reserve, 40, all of same faith as teacher; average attendance, 13.

School building in good repair, and material sufficient. A new dwelling had been put up for the teacher. The examination was highly satisfactory and Mr. Blewitt was doing equally as good work here as he did when at the McDougall Orphanage.

Thirty-two were in Standard I and four in Standard II. The industries were carpentry and gardening by the boys, and sewing and knitting by the girls, Mrs. Blewitt having a sewing class for the girls. Three good tables and some good chairs were made by the boys. A spinning wheel had been supplied by Mr. Agent DeCazes. Four pairs of trousers, three coats, five dresses, and a number of pairs of socks had been made by the girls, and were kept to be distributed by me. The girls' names were Mary Ironhead, Mary Ann Didymus, Flora John, Maggie Whip, Mary House. The only regret I had was that I had not garments enough to go over all the pupils, many of whom were badly in need of warm clothing, so that they may attend more regularly during the cold and stormy weather, and I am happy to be able to say that this want having become known to Mr. Wm. Clendinning and Mrs. John Torrance of Montreal, a liberal supply of clothing was sent to the care of the Rev. Mr. Somerset, as the following extract from a letter I received from that gentleman shows. The letter is dated White Whale Lake, April 21st: "By last mail I received a shipping bill and a letter from Mrs. Torrance. The friends have shipped a nice lot of goods which will be very useful here." This school was in a flourishing condition. It is in connection with the Methodist Church.

The Presbyterian boarding school on Enoch's Reserve, which was closed last year, had not been re-opened as was expected, but six of the pupils were taken to the industrial school at Regina.

Hobbema Agency.

The day school on Louis Bull's Reserve was inspected on 4th March, 1895. Mr. J. A. Youmans, teacher and lay missionary. Number of pupils present, 4; number of school age on reserve, 8; number on roll, 8, all teacher's own faith. Four in Standard I, three in Standard II, and one in Standard III. Building was in good repair, having been newly plastered and whitewashed, but not willowed. Cotton was on hand to put on ceiling.

Mr. Youmans is a capital teacher, and it is to be regretted that a larger attendance could not be secured. The school is in connection with the Methodist Church. Knitting mitts and socks by both boys and girls, and plaiting straw for hats, etc.

The day school on Sampson's Reserve was inspected on 6th March, 1895. Miss Shaw, teacher. Number of pupils present, 13; number enrolled, 24. Eighteen in Standard I; six in Standard II. The building was in good repair, excepting a few panes of glass being broken. It had been plastered and whitewashed, and was more comfortable than the previous two years. Miss Shaw was doing good, faithful work, and the pupils were getting along nicely. It was proposed to move the school to a more central locality. The industries consisted of knitting socks, stockings, shoes and mitts, and some good specimens were to be seen. The girls make dresses for themselves, and were doing the work very well. Would make trousers for the boys if they had the material. Wood was being regularly supplied by the parents. Rev. Mr. Germain is the missionary, and holds services in the school here and at Louis Bull's.

Red Deer Industrial School.

This school was inspected on 26th March, 1895. Rev. John Nelson, principal; Mr. James Skinner, teacher. Number on roll, 36; boys, 20; girls, 16, classified

as follows: Standard I, 3; Standard II, 2; Standard III, 18; Standard IV, 8; Standard V, 5—36.

The school equipment was complete, and material ample. The examination showed capital progress. The pupils here speak fairly in English at all times. The order of the work was the same as reported last year. Discipline was good. Several interesting debates took place during my stay, and boys and girls alike acquitted themselves very well indeed.

The whole work of this school is more fully described in my report on agencies and reserves. The institution is in connection with the Methodist Church.

Sarcee Agency.

St. Barnabas Home and School was inspected on 24th April, 1895. Rev. Gibbon Stocken, principal; Percy E. Stocken, teacher. Number of pupils present, 25; number enrolled, 27; number of school age on reserve, 35. Two boys were absent on leave. Fifteen pupils are paid for at the rate of $72 per annum, and 12 at $12 per annum, also rations of flour and beef for the latter. Fifteen in Standard I; five in Standard II; five in Standard III; and two in Standard IV. The examination was highly satisfactory. The school material was sufficient, and nothing was asked for. A new school building had been erected since last inspection. It is 20 x 40, frame, and sheeted inside with dressed lumber, double floor, shingled roof, ceiling 13 feet high, belfry and bell, cupboard for books, and platform for teacher's desk, building not yet painted. The pupils were well dressed, and looked clean and neat. Some of them are very clever, and all of them are polite and well-behaved. The home is under the auspices of the Church of England, and is doing good work on this reserve. The home proper is more fully described in agency report.

Blood Agency.

The Kissack Home or St. Paul's Boarding School for boys and girls was inspected on 7th May, 1895. Rev. Mr. Swainson, principal, W. F. Baker, teacher in the boys' school; Miss Aldridge, teacher in the girls' department. Number of pupils present, 60 (boys 33, girls 27) and non-treaty, 7 (boys 4, girls 3) making a total of 67 in the institution. The treaty pupils are classified as under: Standard I, boys 23, girls 17. Standard II, boys 10, girls 9. Standard III, 1 girl. Total, boys 33, girls 26. The work done in both departments was very satisfactory. The building was in the best of order; material was sufficient. A sewing class is held every day for the girls from three to four, and a number of useful articles are made and the usual house work is done by the girls. The boys do carpentry and gardening and make baskets and brooms, mats, etc., and milk the cows, attend to the stables. Three deaths took place during the year brought on from measles,—Helena, Annie and Daisy. Dr. Kennedy, of MacLeod, is the medical attendant. The institution is more fully noticed in agency report. It is in connection with the Church of England and is in a most flourishing condition. The boys and girls were neatly dressed and there was an air of comfort and contentedness about the whole place.

The day school at Bull Horn's village was inspected on the 9th May, 1895. Mr. A. F. H. Mills, teacher. Number of pupils present 12, number enrolled 17, number of school age in vicinity 18, of teacher's own faith 17, average attendance 10. All in Standard I, progress fair. The building was in good condition having been plastered and whitewashed and was reported more comfortable than it was last year. School material sufficient. A little had been done in knitting and making rag mats. This school is connected with the Church of England.

Day school at Red Crow's village was inspected on 13th May, 1895. C. A. McAnally, teacher. Number present none, number on roll 14, number of school age in village 16, all of teacher's own faith and all in standard I, average attendence 6. Parents were on a visit at the time to the Piegan Agency, which accounted for the absence of the pupils, and a number of families were removing to Bull Horn

coulee with a view of going into cattle raising, hay and wood being plentiful there. The building was in good repair and material was plentiful. Knitting socks and stockings, mitts, scarfs and cuffs. School in connection with Church of England.

Blackfoot Agency.

The branch of Saint John's Home on White Eagle's village for boys at the South Reserve was inspected on the 28th May, 1895, W. R. Haynes, manager; Mrs. Haynes, matron; W. H. Bonehill, teacher; Rev. Mr. Tims, principal of both homes, North and South Reserves. Number of pupils present 17, number enrolled 17, number of school age in vicinity 20, all of the teacher's own faith. Sixteen in Standard I, and one in Standard II. Progress very satisfactory. The building was in excellent order and is fully described in my agency report. School material ample. The boys were well dressed and seemed happy and contented. This is one of the best equipped schools in the country and Mr. and Mrs. Haynes keep it faultlessly clean. Rooms were decorated with flags and wild flowers. There was a good flower garden and a vegetable one, both attended to by the boys. In connection with the Church of England.

Day school at Eagle Rib's village was inspected on the 29th May, 1895. There were no pupils present, as the families were camped for a while at the North Reserve, and afterwards about a mile below the agency, where Mr. Mahood, teacher, was conducting classes in the lodges. The number on the roll was 26, including visitors from other villages. Number of school age in village and vicinity, 20 —all of teacher's own faith. Nineteen in Standard I and one in Standard II. Building was in good repair, and it was unfortunately burned to the ground a few days after our visit, Mr. and Mrs. Mahood barely escaping with what clothing they had on. Mrs. Mahood had done good work during the winter teaching the girls, and many of the women of the village came also to get lessons in knitting and sewing. Pupil No. 01 made mitts and cuffs; 02, dress and cuffs; 06, cuffs, mitts and dress; 07, dress; 013, socks and dress; 014 made cuffs and dress; married women made socks and stockings, single women the same; boys made some very good brooms. These goods were all on view and were distributed to those most deserving, all feeling very proud. School in connection with the Church of England.

The St. John's Home, on Old Sun's Reserve, was inspected on 30th May, 1895; Rev. Mr. Tims, principal; L. F. Hardyman, manager; W. H. James, teacher. Number of pupils present, 28; number enrolled, 43; number of school age in village and vicinity, 69. Twenty-seven in Standard I, 13 in Standard II, 3 in Standard III. Examination was very satisfactory. The building was in good condition and material sufficient. The inside of the school building had been stained and varnished. The whole institution is fully described in agency report. The boys do gardening, basket and broom making and carpentry, and four or five boys were earning wages working at new buildings. The girls do sewing, knitting and the usual house duties. The home is doing a good work on this reserve. It is in connection with the Church of England.

The first boarding school in this agency was commenced a few years ago on this reserve by Miss Brown, now matron at the Piegans, with three little girls.

Stony Reserve.

The day school in Bear's Paw's village was inspected on 11th June, 1895; Rev. R. B. Steinhauer, teacher and missionary. Number of pupils present, 11; number enrolled, 34; number of school age on reserve, 34; all of teacher's own faith; average attendance, 10. Twenty-eight in Standard I, four in Standard II, two in Standard III. Building was in good repair. The bell had been placed on a platform. School material sufficient, most of it being supplied by the mission. The examination showed an improvement over last year, Mr. Steinhauer being an able teacher. The school is in connection with the Methodist Church. The Rev. Mr. Steinhauer

preaches also in the church at Morley in the absence of the Rev. John McDougall; Indian services in the morning and English in the afternoon.

The McDougall Orphanage was inspected on 12th June, 1895; Mr. J. W. Butler, principal; Mr. J. B. Shaw, teacher. Number of pupils present, 23; number on roll, 31. Some were absent on leave, owing to sickness; classified as under:—

Standard I	3
" II	2
" III	11
" IV	9

The examination showed that the work of the school was well kept up and many of the pupils were well advanced in the different subjects in the programme of studies. Discipline was good; school material plentiful. The new school building put up by the mission during the year was occupied and fully described in report on agencies and reserves. The building is 24 x 30, and the ceiling is 10 feet high; well supplied with blackboards. Stone foundation; six windows; white walls and ceiling tinted blue. A bright and cheerful school and in every way well fitted for the purpose. In connection with the Methodist Church.

Day school in Jacob's Village was inspected on 13th June, 1895; Mr. John Niddin, teacher; number of pupils present, 17; number enrolled, 47; number of school age on the reserve, 49; all of teacher's own faith; 45 in Standard I, 2 in Standard II. Examination was very satisfactory and good live work was being done. The pupils were fairly well dressed and were clean, good use having been made of the basins, soap and towels furnished to each school; building was a roomy one and was in capital order; discipline was good and exercises in calisthenics were well performed. Water-closets for boys and girls at each school on this reserve. This school is in connection with the Methodist Church.

Piegan Agency.

The St. Peter's Boarding and Day School was inspected on 28th June, 1895, the Rev. Mr. Hinchcliffe, principal, Mr. John Alfred Mason, teacher; number of pupils present, 21; number enrolled, 23; number of school age in vicinity, 23; two pupils were absent on leave; 22 in Standard I, one in Standard II. Progress was satisfactory. The pupils were well dressed and looked neat and clean. The school room is the same as reported last year: the efforts to have a better one had not been a success so far. School material was sufficient. The home is more fully referred to in my agency report. It is in connection with the Church of England.

Touchwood Hills Agency.

The day school on Day Star's Reserve was inspected on 23rd July, 1895. Mr. Mark Williams, teacher; number of pupils present, 6; number enrolled, 8; number of school age on reserve, 12; all of teacher's own faith; average attendance, 6; 4 in Standard II, 4 in Standard III. Examination was satisfactory and showed that Mr. Williams was a careful teacher. The school-room is a wing of the teacher's dwelling, and needed some slight repairs, which I reported. School material was sufficient. The pupils were clean and fairly well dressed, except in footwear, which was ragged. The girls do knitting and sewing, and a good selection of specimens was sent to the territorial fair in Regina, but having been put in competition with industrial and boarding schools, I presume these little girls got no prizes. For handwork their exhibit was worthy of a prize. Mrs. Williams, wife of the teacher, attends to this department, as well as teaching the women on the reserve. The boys work in the garden, Mr. Williams having a very good one. This school is in connection with the Church of England.

The boarding and day school on Gordon's Reserve was inspected on 25th July, 1895. The Rev. Mr. Owens, principal; Rev. Mr. Lallemand, teacher; number of

pupils present, 20; number enrolled, 26 (21 boarders and 5 day scholars), classified as under:—

Standard I	7
" II	7
" III	7
" IV	3
" V	2
	26

The examination was very satisfactory, and proved Mr. Lallemand to be a competent teacher. School material was sufficient, a few articles only having been asked for. The pupils were neatly dressed and were clean, so was the school-room, and a new stone building was about being finished, and which is fully described in my agency report.

Some good specimens of industrial work in knitting, sewing, bread, butter, &c., were sent to the fair in Regina. This school is doing good work on this reserve. It is in connection with the Church of England.

Summary of Schools Inspected.

CHURCH OF ENGLAND.

	Pupils enrolled.	
1 Industrial school	102	
7 Boarding schools	214	
8 Day schools	132	
		448

METHODIST CHURCH.

1 Industrial school	36	
1 Boarding (orphanage)	31	
9 Day schools	235	
		302
Total number of pupils		750
Total number of schools		27

In closing this report I would remark that the schools, as a whole, were well equipped and the buildings comfortable places, and the work generally was being done in a satisfactory manner, and the disposition on the part of the parents to have their children attend regularly was better than usual.

I have the honour to be, sir,
Your obedient servant,

ALEX. McGIBBON,
Inspector Indian Agencies and Reserves.

INDIAN WOMEN WHO HAVE COMMUTED THEIR ANNUITY BY A TEN YEARS' PURCHASE UNDER SECTION 11 OF THE INDIAN ACT.

1879-80.

Treaty No. 1.

Harriet Hunt, St. Peter's	$ 50 00

1880-81.

Treaty No. 2.

Isabella McAully, No. 29, Ebb and Flow Lake	50 00
Suzanne Sinclair, No. 37 do	50 00
Marguerite Moar, No. 28 do	50 00
Margaret Monkham, No. 24, Lake Manitoba	50 00
Mary Jane Garreoch, No. 12, Fairford	50 00

1881-82.

Treaty No. 2.

Elizabeth Moar, No. 5, Fairford River	50 00

Treaty No. 5.

Elizabeth Brittain, No. 6, Cumberland	50 00
Annie Cox, No. 26 do	50 00
Mrs. Jourdain, No. 55 do	50 00
Annie McKay, No. 58 do	50 00
Josette Sais, No. 77 do	50 00

Treaty No. 6.

Mrs. T. T. Quinn, No. 42, Red Pheasant	50 00

1882-83.

Treaty No. 2.

Mary Saunderson, Lake Manitoba	50 00

Treaty No. 4.

Marguerite Parisien, Pasquah's Band	50 00
Marie Rose Parisien do	50 00
Mame Parisien do	50 00
Françoise Parisien do	50 00
Teresa St. Denis do	50 00
Julie St. Denis do	50 00
Rosalie St. Denis do	50 00
Marie St. Denis do	50 00

Françoise Desjerlais,	Muscowequan's Band	$ 50 00
Isabelle Desjerlais	do	50 00
Caroline Blondeau	do	50 00
Melanie Blondeau	do	50 00

1883-84.

Treaty No. 1.

Margaret McLeod,	No. 146, St. Peter's Band	50 00
Margaret Pritchard,	No. 357 do	50 00

Treaty No. 2.

Maria Misayabit,	No. 20, Lake Manitoba	50 00
Margaret Misayabit,	No. 21 do	50 00
Shaw-aw-way-in-cit-ah-wook,	No. 24 do	50 00
Isabella,	No. 1 do	50 00

Treaty No. 4.

Mary Ann McKay,	No. 12, Little Black Bear's Band	50 00
Caroline Peletier,	No. 27, Cowesess' Band	50 00
Mrs. Trochier or Oopeepeewahnook,	No. 9, Cowesess' Band	50 00

Treaty No. 5.

Christie McLeod,	No. 184, Norway House	50 00
Catherine Swain,	No. 138 do	50 00
Bella Morrisson,	No. 81 do	50 00
Rosalie Moore,	No. 21, Grand Rapids	50 00
Harrie Houston,	No. 15 do	50 00

1884-85.

Treaty No. 1.

Lydia Sutherland,	No. 354½, St. Peter's	50 00
Jane Whyte,	No. 371½ do	50 00
Charlotte Desrosiers,	No. 170 do	50 00
Emily Isbester,	No. 361 do	50 00
Margaret Thom,	No. 63 do	50 00
E. J. McLeod,	No. 136 do	50 00
Caroline McDonald,	No. 388 do	50 00
Victoria Young,	No. 166 do	50 00
Nancy Leask,	No. 143 do	50 00
Lucy West,	No. 409 do	50 00
Nancy Marsh,	No. 42 do	50 00
Jane Grey,	No. 322 do	50 00
Jane M. Snider,	No. 394 do	50 00
Lucy Fiddler,	No. 101 do	50 00
Catherine Walker,	No. 401 do	50 00
Rosalie Gagnon,	No. 53½, Fort Alexander	50 00
Charlotte Lapierre,	No. 53½, Brokenhead River	50 00

Treaty No. 4.

Julia Angneau,	No. 71, Pasquah's Band	50 00
Nélaine Wallet,	No. 66 do	50 00

Treaty No. 5.

Jane Shaw,	No. 29, Fisher River Band	$ 50 00
Betsy Semours,	No. 26 do	50 00
Adelaide Garson,	No. 43, Norway House	50 00

Treaty No. 6.

A. Laframboise,	No. 27, Petaquakey's Band	50 00

1885-86.

Treaty No. 1.

Anne Favel,	No. 12, Long Plain Band	50 00

Treaty No. 4.

Theresa Breland,	Cowesess' Band	50 00
Sarah Fisher,	No, 37, Muscowpetung's Band	50 00
Mary Thomas	do do	50 00
Susie Thompson,	sister of Chief Jack, Assiniboine Reserve	50 00
Mary McDonald,	No. 13, Keeseekouse	50 00

Treaty No. 5.

Mary Jane Boulette,	No. 82, Hollow Water River	50 00

Treaty No. 6.

Mary DeCoteau,	No. 33, Red Pheasant's Band	50 00
Emilie Vivier,	No. 50, Seekaskoutch's Band	50 00

1886-87.

Treaty No. 1.

Agnes Briere,	No. 20, Fort Alexander	50 00
Jessie Spence,	No. 304, St. Peter's	50 00
Catherine Kennedy,	No. 510, St. Peter's	50 00

Treaty No. 3.

Hannah McIvor,	No. 75, Lac Seul Band	50 00
Magna Young,	No. 103 do	50 00
Louisa Kirkness,	No. 116 do	50 50

Treaty No. 6.

Louisa Donald,	No. 57, James Seenum's Band	50 00
Annie Whitford,	No. 73, Alexander's do	50 00
Catherine Besson,	No. 34, Muskegwatic's do	50 00
Jane Collins,	No. 14 Blue Quill's do	50 00
Emma Brabant,	No. 53 Red Pheasant's do	50 00

Treaty No. 4.

Sally Bird,	Blackfoot Reserve	50 00

1887-88.

Treaty No. 1.

Georgina Starke, No. 365, St. Peter's		$ 50 00
Kapoosohahsohting, No. 28, Brokenhead River		50 00

Treaty No. 4.

Philomene Daniels, No. 35, Peepeekeesis' Band		50 00
Elizabeth H. Pratt, No. 10, Gordon's	do	50 00
Anne Houle, No. 123, Gambler's	do	50 00

Treaty No. 5.

Mrs. Mary Ned, No. 17, Black River		50 00
Jane Norquay, No. 61, Fisher River		50 00

Treaty No. 6.

Rosaline Fournier, No. 53, John Smith's Band		50 00
Peggy Favel, No. 26, Muskegwatic's	do	50 00

Treaty No. 7.

Lucy Cook, No. 25, Running Wolf's Band, Piegan Reserve		50 00

1888-89.

Treaty No. 1.

Mrs. Catherine Ann Michaud, No. 536, St. Peter's		50 00
Mrs. Mary Elizabeth Clouston, No. 511	do	50 00
Mrs. Catherine Gilliaud No. 77	do	50 00

Treaty No. 6.

Adelaide Loyer, No. 132, Michel's Band		50 00
Margaret Cardinal, No. 11, Beaver Lake Band		50 00
Matilda Cardinal, No. 41, Lac La Biche	do	50 00
Mrs. D. Leblanc, No. 99, Attakakoop's	do	50 00

Treaty No. 7.

Emma Jonas, Stony Reserve, Bear's Paw Band		50 00

1889-90.

Treaty No. 1.

Eliza Daniels, No. 295, St. Peter's Band		50 00
Mrs. Ed. Kippling, No. 551	do	50 00

Treaty No. 2.

Maria Lamalice, No. 33, Water Hen River		50 00

Treaty No. 5.

Emma Robideaux, No. 20, Black River		50 00
Kitty Smith, No. 29, Moose Lake		50 00

Treaty No. 6.

Emma Higgins or Apistatim,	No. 111, Thunderchild's Band	$	50 00
Phœbe Jefferson,	No. 189, Poundmaker's do		50 00
Judith Boucher,	No. 109, James Seenum's do		50 00

Treaty No. 7.

Julia Choquette,	No. 46, Blood Reserve, Running Wolf's Band		50 06
Isabella Grant,	No. 59 do do		50 00
Mrs. Howard,	No. 35, Blood Band N		50 00
Mrs. Murphy,	No. 19 do M		50 00
Mrs. Millar,	No. 34 do I		50 00

1890-91.

Treaty No. 1.

Matilda Asham,	No. 6, St. Peter's		50 00
Harriet Fontaine,	No. 531 do		50 00
Mary Ann Johnston,	No. 160, Fort Alexander		50 00
Angelique Johnston,	No. 162 do		50 00

Treaty No. 5.

Margaret Jane Buck,	No. 69, Moose Lake		50 00
Philemene Budd,	No. 116, Cumberland		50 00
Margaret Mackay	No. 110 do		50 00
Margaret Saunders,	No. 41, Pas		50 00
Mary J. Cochrane,	No. 24, Fisher River		50 00

Treaty No. 4.

Marie Gervais,	No. 83, Cowesess' Band		50 00

Treaty No. 6.

Mrs. Charles Fiddler,	No. 50, James Smith's Band		50 00
Lizzie Callihoo,	No. 132, Michel's do		50 00
Rosalie House,	No. 1, Ermineskin's do		50 00
Elizabeth St. Germain,	No. 137, George Gordon's do		50 00

1891-92.

Treaty No. 1.

Mrs. Joseph Moore,	No. 394, St. Peter's		50 00
Mrs. Sarah Sasford,	No. 49 do		50 00
Mrs. Sarah Sargeant,	No. 558 do		50 00
Mrs. Jane Mowat,	No. 218 do		50 00
Eliza Ann Walker,	No. 393 do		50 00

Treaty No. 2.

Marie Ste. Matte,	No. 58, Lake Manitoba		50 00
Elsie Spence,	No. 46, Ebb-and-Flow Lake		50 00

Treaty No. 5.

Sarah Clarke,	No. 22, Black River	$ 50 00
Mrs. Albert Ballendine,	No. 101, Cumberland	50 00

Treaty No. 4.

Nancy Laronde,	No. 54, Key's Band	50 00
Flora Chartrand,	No. 26 do	50 00
Harriet Chartrand,	No. 26 do	50 00

Treaty No. 6.

Maria Beaudry,	No. 36, Mistawasis' Band	50 00

1892-93.

Treaty No. 1.

Nancy Harper,	No. 54, St. Peter's Band	50 00
Alice Linklater,	No. 130, Brokenhead do	50 00
Annabella Gates,	No. 560, St. Peter's do	50 00

Treaty No. 3.

Isabella Jette,	No. 46, Grassy Narrows Band	50 00

Treaty No. 5.

Margaret Dorion,	No. 219, Pas Band	50 00
Isabella Judd,	No. 125, Cumberland Band	50 00

Treaty No 4.

Mary Field,	No. 4, Key's Band	50 00

Treaty No. 6.

Maria Beaudry,	No. 33, Mistawasis' Band	50 00
Eliza Shaw,	No. 82, John Smith's do	50 00
Isabella Pruden,	No. 86 do do	50 00
Bella,	No. 101, Enoch's do	50 00
Margaret Calder,	No. 27 do do	50 00
Isabella Blanc,	No. 10 do do	50 00

1893-94.

Treaty No. 1.

Mrs. Elizabeth Lecoy,	No. 157, Fort Alexander Band	50 00
Mrs. Mary Ann Hamelin,	No. 99, St. Peter's Band	50 00
Mrs. Margaret Sinclair,	No. 142 do	50 00
Caroline Mayo,	No. 490 do	50 00
Esther Flett Kippling,	No. 526 do	50 00
Mrs. Margaret Rochen,	No. 374 do	50 00
Juliet Kennedy,	No. 569 do	50 00

Treaty No. 2.

Jane Anderson,	No. 55, Fairford Band	50 00

Treaty No. 3.

Elizabeth Mainville,	No. 44,	Coutcheeching	Band	$ 50 00
Maria Jourdain,	No. 7	do		50 00

Treaty No. 5.

Maria Disbrowe,	No. 142,	Poplar River	Band	50 00
Mary Favel,	No. 66,	Fisher River		50 00
Mrs. Albert Tate,	No. 43,	Norway House		50 00

Treaty No. 4.

Mary Murray,	No. 131,	Côté's	Band	50 00

Treaty No. 6.

Maria Isabella Laliberté,	No. 22,	Kapahawekenum's	Band	50 00
Maggie Drevor,	No. 132,	Ahtakakoop's	do	50 00
Julia Arcand,	No. 4,	Petequakey's	do	50 00
Eliza McKay,	No. 141,	Mistawasis'	do	50 00
Mary Ann McLeod,	No. 91,	James Robert's	do	50 00
Nancy Saunderson,	No. 84	do	do	50 00
Alice Saunderson,	No. 70	do	do	50 00
Marie Louise Grove,	No. 120,	Enoch's	do	50 00
Mary Paul,	No. 131	do	do	50 00
Cecile Passpasschase,	No. 93	do	do	50 00

1894-95.

Treaty No. 1.

Margaret Nolin,	No. 183,	Rosseau River	Band	50 00
Mary Ann Folster,	No. 639½,	St. Peter's	do	50 00
Flora Bella Harper,	No. 646	do	do	50 00
Mary Minnie,	No. 613	do	do	50 00
Maria Adele Starr,	No. 40,	Fort Alexander	do	50 00

Treaty No. 2.

Sophie Napakisit,	No. 18,	Pine Creek	Band	50 00
Maria Lacouette,	No. 38,	Water Hen River	Band	50 00

Treaty No. 3.

Ann Savyard,	No. 16,	Islington	Band	50 00
Mrs. James Swan,	No. 46,	Dalles	do	50 00
Mary Brown,	No. 19,	Nickousemenicaning	Band	50 00
Sarah Park,	No. 5,	Wabigoon	Band	50 00

Treaty No. 4.

Mrs. Virginia Favel,	No. 54,	George Gordon's	Band	50 00
Mrs. Nancy LaVallie,	No. 13	do	do	50 00
Isabella Peppin,	No. 157	Gambler's	do	50 00
Cecile Fleury,	No. 160	Way-way-see-cappo's	Band	50 00
Victoria Nabbis,	No. 160	Gambler's	Band	50 00
Mary Bellehurnier,	No. 140	do		50 00
Susanne Nadeau.	No. 37	Cowesess'	do	50 00

Treaty No. 5.

Elizabeth Papanakis,	No. 24,	Fisher River	Band		$ 50 00
Maggie Raymond,	No. 190	do	do		50 00
Fanny Thomas,	No. 1	do	do		50 00
Elizabeth Dahl,	No. 45	do	do		50 00

Treaty No. 6.

Nancy Howse,	No. 17,	Wahsatanow	Band		50 00
Eliza Howse,	No. 42,	do			50 00
Genevieve Larocque,	No. 138,	James Seenum's	Band		50 00
Isabella Loyer,	No. 5,	Michel's	do		50 00
Josephine Laderoute,	No. 1,	do	do		50 00
Susette Morin,	No. 33,	Kapahawekenum	do		50 00
Eliza Masketaytamay,	No. 99,	Mistawasis	do		50 00

LAND AND TIMBER BRANCH.

The land sold during the year amounts to 32,205.61 acres, and the sales to $72,423.36.

The quantity of surrendered land still in the hands of the department, in round numbers, is 461,613 acres.

Agents' returns (for land, timber and rent) examined and entered	514
New sales	439
Number of sales cancelled	108
Number of leases issued and entered	101
Number of timber licenses renewed	23
Number of payments on leases entered	763
Number of payments on old sales entered	336
Number of notices to purchasers in arrears prepared and sent out	1,735
Location tickets issued and entered	37
Assignments of land examined and entered	249
Assignments of land registered	215
Descriptions for patents prepared and entered	376
Number of patents engrossed	376
Number of patents registered	376
Number of patents despatched	376
Number of patents cancelled	2

The total collections on account of old and new sales, on rents and on timber, amounted to $90,922.38.

The purchase money and interest thereon in arrears on land sales on the 30th June, 1895, amounted approximately to $101,683.11.

Principal	$49,831 79
Interest	51,851 32
Total	$101,683.11

For further details, see tabular statement No. 1 on pages 318–319.

HAYTER REED,
Deputy Supt. Gen. of Indian Affairs.

J. D. McLEAN,
In charge of Land and Timber Branch.

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, 30th June, 1895.

TABULAR STATEMENT No. 1.—LAND AND TIMBER BRANCH.

SHOWING the number of acres of Indian Lands sold during the year ended 30th June, 1895, the total amount of Purchase Money, and the approximate quantity of surrendered surveyed Indian Lands remaining unsold at that date.

PROVINCE OF ONTARIO.

Town or Township.	County or District.	Number of Acres sold.	Amount of Sale.	Approximate Quantity remaining unsold.	Remarks.
			$ cts.	Acres.	
Albemarle	Bruce	2,185·80	1,005 00	2,236·36	Some of these lands were resumed by the department, the conditions of sale not having been complied with, so that in certain cases there appears to have been more land remaining unsold at the close of the past fiscal year than remained unsold according to the previous year's report
Amabel	"	166 00	69 50	945·00	
Eastnor	"	2,045·68	790 27	4,710·32	
Lindsay	"	6,710·00	2,295 25	13,543·00	
St. Edmund	"	3,383·00	1,140 00	36,183·00	
Bury, town plot	"	·25	30 00	1,767·00	
Hardwick, town plot	"	.....	.....	1,111·00	
Oliphant "	"	.....	.....	89·00	
Southampton "	"	.....	.....	26·25	
Wiarton "	"	12·15	75 10	35·85	
Brooke "	Grey	2·75	110 00	.....	
Keppel "	"	617·00	705 00	2,724·85	
Saugeen Fishing Islands	Lake Huron and Georgian Bay	.....	.....	880·50	
Cape Hurd Islands	"	.....	.....	7,720·50	
Mississagua Reserve	Algoma District	.....	.....	1,173·64	
Thessalon	"	131·00	131 00	2,994·87	
Thessalon, town	"	4·36	304 25	94·83	
Aweres	"	.....	.....	13,584.00	
Archibald	"	.....	.....	2,900·00	
Dennis	"	.....	.....	3,349·00	
Fisher	"	.....	.....	9,602·00	
Herrick	"	.....	.....	7,267·53	
Havilland	"	.....	.....	3,660·00	
Kars	"	.....	.....	9,479·00	
Apaquash, town plot	"	·35	3 50	316·56	
Laird	"	312·24	283 65	9,267·75	
Macdonald	"	239·00	119 50	2,218·35	
Meredith	"	.....	.....	7,695·70	
Pennefather	"	.....	.....	18,131·00	
Tilley	"	.....	.....	12,691·00	
Tupper	"	.....	.....	2,800·00	
Fenwick	"	.....	.....	12,787·00	
Vankoughnet	"	75·00	37 50	10,675·00	
Shingouicouse, town plot	"	.....	.....	269·00	
Bidwell	Manitoulin Dist.	500·00	119 50	7,441·00	
Howland	"	159·00	35 00	4,803·00	
Sheguiandah	"	309·00	65 25	12,355·00	
" town plot	"	.....	.....	398·23	
Billings	"	200·00	70 00	5,978·00	
Assiginack	"	.....	.....	7,491·00	
Campbell	"	531·00	141 65	8,471·75	
Manitowaning, town plot	"	.....	.....	71·60	
Carnarvon	"	1,601·00	637 50	12,550·00	
Tehkummah	"	400·00	85 50	8,051·00	
Sandfield	"	202·00	75 25	7,667·00	
Shaftesbury, town plot	"	·75	50 00	147·69	
Tolsmaville town plot	"	.....	.....	1,567·31	
Allan	"	1,785·00	167 00	6,041·00	
Burpee	"	100·00	25 00	13,942·00	
Barrie Island	"	870·00	261 00	2,990·00	
Gordon	"	639·00	153 10	3,787·00	
Gore Bay, town	"	1·59	65 80	5·81	
Mills	"	100·00	15 00	8,250·00	
Cockburn Island	"	.....	.....	32,445·00	
Dawson	"	100·00	56 81	30,014·00	
Robinson	"	730·00	185 50	49,289·00	
Neebing	Thunder Bay Dist.	.....	.....	3,778·00	
Sarnia, town	Lambton	.....	.....	5·56	
Anderdon	Essex	199·08	1,668 00	.....	Water frontage.

TABULAR STATEMENT No. 1.—Showing the number of acres of Indian Lands sold during the year ended 30th June, 1895, &c.—*Continued.*

PROVINCE OF ONTARIO—*Continued.*

Town or Township.	County or District.	Number of Acres sold.	Amount of Sale.	Approximate Quantity remaining unsold.	Remarks.
			$ cts.	Acres.	
Golden Lake	Renfrew	1·94	98 01		Right of way of O. A. & P. S. Ry.
Seneca	Haldimand			192·71	
Cayuga, town plot	"	2·96	40 00	244·27	
do	"			312·60	
Dunn	"			1,571·50	
Caledonia, town plot	"			56·86	
Brantford	Brant	5·25	157 38	136·10	
Bronte, town plot	Halton			10·93	
Port Credit, town plot	Peel			0·25	
Deseronto "	Hastings			6·50	
Islands in the River St. Lawrence	Prov. of Ontario	447·62	33,193 55	300·00	
Islands in the Otonabee and Lakes	Peterborough, &c	3·64	100 00	2,087·00	
Thora Island	Lake Simcoe			74·00	
White Cloud Island	Georgian Bay			244·59	
Sultana Island	Rainy River Dist.			421·12	
Shannonville, town plot	Hastings			0·88	
Tyendinaga	"	86·43	1,693 00		
		24,849·84	46,258 32	436,128·12	

PROVINCE OF QUEBEC.

Ouiatchouan	Chicoutimi	525·00	220 50	9,532·18	
Colraine	Megantic			1,203·00	
Dundee	Huntingdon	443·65	1,109 29	8,983·31	
Viger	Temiscouata	202·10	177 50	367·20	
		1,170·75	1,507 29	20,085·69	

NORTH-WEST TERRITORIES AND BRITISH COLUMBIA.

Papaschase	North-west Territories	6,148·00	24,347 75	5,399·83	
Railway right of way	British Columbia	2·75	110 00		Railway right of way.
" "	Stony Res., N.W.T	34·27	200 00		" "
		6,185·02	24,657 75	5,399·83	

TABULAR

AGRICULTURAL and

PROVINCE, AGENCY OR BAND.	Resident Indian population.	IMMOVABLE PROPERTY, LAND CULTIVATED, AND FRESH LAND PLOUGHED.					PERSONAL									
		Houses.	Barns.	Stables.	Land cultivated.	Land newly broken up.	Ploughs.	Harrows.	Wagons.	Carts.	Fanning mills.	Threshing machines.	Mowing machines.	Reapers.	No. of other implements.	Horses.
Ontario.					Ac.	Ac.										
Grand River Superintendency—																
Six Nations	3629	633	122	322	30133	.....	397	335	333	205	161	5	106	98	190	1169
Mississaguas, New Credit	242	94	60	45	4000	50	100	80	150	40	45	2	25	15	150	220
Walpole Island	828	215	14	122	3049	111½	91	54	112	....	24	1	16	9	45	438
Western Superintendency—																
1st Division	475	131	17	70	2515	125	89	72	128	....	35	1	19	23	34	119
2nd "	1348	289	42	126	8258	111	156	124	243	36	58	1	41	29	196	397
3rd "	304	79	20	39	1270	40	44	37	54	20	15	...	9	9	50	106
Northern Superintendency—																
1st Division	3756	836	206	590	7391	382	297	249	156	1	36	8	1	....	2100	789
2nd "	859	210	80	80	5945	42	30	31	9	....	....	....	....	....	....	44
3rd "	1150	152	44	55	2426	86	47	31	13	2	3	1	....	....	1	75
4th "	1756	292	10	10	438	8½	11	7	2	1	1	1	1	....	155	10
Golden Lake Agency	90	17	4	12	53	7	8	6	....	....	....	....	....	....	....	11
Tyendinaga "	1153	217	100	85	10000	.....	170	160	100	....	60	2	40	25	500	250
Lake Simcoe "	118	32	17	17	354	4	15	13	7	....	6	1	1	2	29	40
Cape Croker "	392	109	45	55	1340	40	94	60	110	2	16	1	3	2	1160	105
Saugeen "	378	89	15	61	885	35	48	26	42	....	8	2	1	....	109	120
Alnwick "	229	54	21	10	2470	....	25	23	17	....	10	....	3	3	83	58
Mud Lake "	162	35	....	18	125	.....	7	7	3	1	1	.....	...	1	60	19
Rice Lake "	79	28	8	12	750	.....	11	7	6	...	3	....	1	1	33	20
Rama "	229	81	31	32	798	3	20	24	15	....	7	....	3	2	97	35
Penetanguishene "	397	69	23	52	553	58	24	21	10	1	5	1	....	....	31	69
Scugog "	37	10	4	6	100	.....	5	3	2	1	3	....	....	1	6	8
Total	17611	3672	883	1819	82853	1103	1689	1370	1512	310	497	27	270	220	5029	4102

NOTE—The 1st division of the Western Superintendency of Ontario includes the Chippewas of Sarnia, and Munsees and Oneidas of the Thames; and the 3rd division of the same superintendency comprehends

The 1st division of the Northern Superintendency of that province includes the Ojibewas, Ottawas Huron; the 2nd division of that superintendency embraces the Ojibewas of Parry Island, Shawanaga, division of the same superintendency comprehends the Ojibewas of Garden River, Batchewana Bay and

STATEMENT No. 2.

Industrial Statistics.

Property.						Grain and Roots Harvested.											Fish, Furs and other Industries.
Cows.	Oxen.	Bulls.	Sheep.	Pigs.	Number of young stock.	Wheat.	Oats.	Pease.	Barley.	Corn.	Rye.	Other grain.	Potatoes.	Turnips.	Beans.	Apples.	Hay.	Value.
						Bus.	Bus.	Bus.	Bus.	Bus.	Bus	Bus	Bus.	Bus	Bus	Bus	Tons	$ cts.
750	26	26	278	1282	977	46415	48119	11829	1296	10318	1022	118	6120	....	....	....	3810	3,300 00
195	4	2	125	190	400	8000	12000	1890	1800	80	400	....	600	....	....	....	650	2,000 00
177	24	9	44	494	309	6479	4532	136	.....	4183	....	....	2954	....	792	1584	1154	7,565 00
187	2	7	30	107	66	7043	12379	365	727	3381	....	....	3546	....	....	....	414	849 00
140	....	6	27	324	236	10583	16272	761	223	15667	60	135	5603	....	....	....	768	1,797 00
110	10	5	18	160	66	3833	3275	250	.....	2963	....	94	1501	....	525	....	123	225 00
326	211	30	154	1069	450	3133	6081	5936	10	2912	....	....	33020	....	....	....	1816	23,372 00
94	20	1	18	51	136	55	490	196	.....	267	....	....	3980	....	....	....	187	9,714 00
61	20	5	10	18	79	....	542	140	.....	175	....	....	7756	....	....	....	420	16,248 00
20	10	4	....	4	24	.....	450	.....	.....	.....	....	....	6900	400	....	....	104	70,050 00
9	2	....	4	16	6	.....	250	120	.....	80	....	....	200	....	....	....	20	886 00
300	....	10	100	250	300	6700	20000	2400	6000	2500	2000	3000	3000	....	....	....	800	300 00
18	....	2	....	71	19	380	2250	480	.....	38	....	120	1320	....	....	....	74	2,100 00
42	2	1	56	275	190	1500	2200	1300	80	375	....	....	1000	....	....	....	75	3,985 00
20	2	....	....	120	70	320	1600	250	.....	1300	....	....	1750	....	....	....	150	3,200 00
14	....	2	24	48	26	558	1830	2534	445	39	507	614	1428	2635	5	....	88	7,590 00
10	....	....	....	3	11	420	700	75	60	20	....	....	1200	....	....	....	7	6,908 00
12	....	....	....	61	18	1180	1800	1340	30	40	....	....	465	1175	....	....	25	2,300 00
23	....	4	11	175	50	500	3800	1200	.....	80	....	....	3700	....	....	....	208	3,500 00
29	20	4	19	96	35	340	481	633	6	163	....	....	895	....	....	....	95	350 00
1	....	....	....	4	2	40	340	.....	.....	25	....	140	90	....	....	50	6	770 00
2538	353	118	918	4818	3470	97479	139391	31835	10677	44606	3989	4221	87028	4210	1322	1634	10994	167,009 00

Kettle Point and Rivière aux Sables ; the 2nd division of that superintendency embraces the Chippewas the Moravians or Delawares of the Thames.
and Nipissinguas of Manitoulin and Cockburn Islands, and the Ojibewas of the north shore of Lake Henvey Inlet, Lake Nipissing, French River, Lake Temiscamingue and the Iroquois of Gibson ; the 3rd Michipicoten ; and the 4th division of the said superintendency takes in all the Ojibewas of Lake Superior.

TABULAR

AGRICULTURAL and

PROVINCE, AGENCY OR BAND.	Resident Indian population.	IMMOVABLE PROPERTY, LAND CULTIVATED AND FRESH LAND PLOUGHED.					PERSONAL							
		Houses.	Barns.	Stables.	Land cultivated.	Land newly broken up.	Ploughs.	Harrows.	Wagons.	Carts.	Fanning mills.	Threshing machines.	Mowing machines.	Reapers.
Quebec.					Acres.	Acres.								
Lake of Two Mountains Agency	431	81	20	55	1408		39	29	32	58	6	2	6	
Caughnawaga Agency	1897	428	100	287	4370	40	240	180	180	200	20	16	25	6
St. Regis "	1231	193	76	80	2685	28	90	72	89	9	8	13	34	15
Viger "	114	22	....	....	....	....	....	....	....	....	....	....	....	....
St. Francis "	325	71	13	12	145	....	1	2	5	4	....	....	....	....
Lake St. John "	470	95	13	14	105	6	16	15	16	6	1	1	1	....
Maria "	91	22	15	15	250	3	5	6	4	11	....	....	....	....
Restigouche "	476	84	53	....	665	10	23	16	8	19	1	4	4	....
River Desert "	486	75	28	20	745	10	19	16	10	4	2	....	....	....
Jeune Lorette "	409	71	5	5	170	10	5	3	5	7	....	....	....	....
*North Shore River St. Lawrence Superintendency	1302													
Becancour Agency	55	9	3	2	78	1	3	3	4	....	....	....	....	....
Temiscamingue Agency	139	60	11	17	140	10	7	6	1	1	2	1	....	....
Total	7426	1211	337	507	10761	118	448	348	354	319	40	37	70	21
New Brunswick.														
North-eastern Superintendency	956	205	40	37	773	21	13	11	15	2	....	....	....	....
South-western "														
1st Division	475	71	10	5	163½	....	13	14	18	....	1	....	1	....
2nd "	237	41	19	4	307	20	15	16	18	....	....	....	1	....
Total	1668	317	69	46	1243½	41	41	41	51	2	1	....	2	....

*No statistics have been received since those sent in by Mr. L. F. Boucher, the late Indian superin

NOTE.—The North-eastern Superintendency of New Brunswick includes the Micmas of the counties ince embraces the Amalecites of all the counties on the south and west side of the province, except

STATEMENT No. 2

Industrial Statistics—*Continued.*

Property.								Grain and Roots Harvested.										Fish, Furs and other Industries.
Number of other implements.	Horses.	Cows.	Oxen.	Bulls.	Sheep.	Pigs.	Number of young stock.	Wheat.	Oats.	Pease.	Barley.	Corn.	Other grain.	Potatoes.	Beans.	Garden seeds.	Hay.	Value.
								Bus	Bus.	Bus.	Bus	Bus	Bus	Bus.	Bus	Bus	Tons.	$ cts.
340	95	65	....	12	31	105	78	133	2741	105	45	572	710	2774	126	....	135½	9,915 00
165	220	300	10	15	30	150	215	220	22800	1200	1560	600	1050	9000	....	....	1100	17,000 00
110	202	195	2	14	....	125	109	1275	6520	400	....	2204	438	3100	....	....	1000	10,200 00
....	....	....	....	....	....	....	....	....	.....	.....	....	....	....	.....	....	....	.....	1,588 00
....	9	15	....	....	....	6	12	....	.....	.....	....	....	....	.....	....	....	.....	8,000 00
2	22	32	10	....	....	41	25	130	700	121	....	..	10	660	....	....	17	7,700 00
....	10	11	4	2	3	7	8	....	805	4	....	....	150	1800	....	....	19	1,320 00
7	41	32	28	....	20	126	44	....	3750	...	....	....	915	1186	....	....	119	1,200 00
160	26	35	....	1	20	30	65	....	1200	160	....	25	20	3100	....	....	315	17,000 00
....	7	15	....	1	....	20	4	....	250	50	....	....	30	150	....	....	40	25,155 00
25	2	3	....	1	....	2	3	....	160	39	....	10	40	145	....	....	35	900 00
21	13	10	1	1	13	43	14	53	192	194	....	....	....	1165	....	....	26	1,810 00
830	647	713	55	47	117	655	577	1811	39118	2273	1605	3411	3363	23080	126	....	2806½	101,788 00
28	14	34	4	....	....	26	26	125	2180	.....	....	....	20	6175	....	....	188	11,250 00
168	14	8	1	1	4	24	20	....	1033	22	....	10	145	1250	35	105	46½	12,175 00
90	21	17	2	1	5	60	31	....	1325	10	....	20	600	1670	15	....	115	13,700 00
286	49	59	7	2	9	110	77	125	4538	32	....	30	765	9095	50	105	349½	37,125 00

tendent.
on the north-east of that province. The 1st division or South-western Superintendency of that pro-
Victoria and Madawaska, which form the 2nd division of the superintendency.

TABULAR

AGRICULTURAL and

PROVINCE, AGENCY OR BAND.	Resident Indian population.	IMMOVABLE PROPERTY, LAND CULTIVATED, AND FRESH LAND PLOUGHED.					PERSONAL								
		Houses.	Barns.	Stables.	Land cultivated.	Land newly broken up.	Ploughs.	Harrows.	Waggons.	Carts.	Fanning mills.	Threshing machines.	Mowing machines.	Reapers.	Number of other implements.
Nova Scotia.					Ac.	Ac.									
Annapolis	82	15	....	....	..	....	....	....	....	....	....	....	....	....	2
*Shelburne	57	8	3	....	.....	....	1	1	....	....	....	....	....	....	.....
Digby	180	51	6	2	250	10	....	....	....	....	....	....	....	....	184
Yarmouth	91	4	....	....	4	1	....	....	....	....	....	....	....	....	.....
King's	77	9	1	....	10	1	1	1	1	....	....	....	....	....	4
Queen's and Lunenburg	164	49	19	2	233	4	7	3	7	3	....	....	....	....	23
Halifax	119	35	5	....	35	....	....	....	2	....	....	....	....	....	.....
Hants	199	21	....	9	300	10	4	1	5	....	....	....	....	....	.....
Colchester	100	27	....	....	11	1	....	....	....	....	....	....	....	....	.....
Cumberland	101	15	4	2	20	....	1	1	2	....	....	....	....	....	12
Pictou	206	53	2	2	32	....	....	....	1	....	....	....	....	....	.....
Antigonish and Guysboro'	167	49	4	2	325	2	2	1	....	1	....	....	....	....	.....
Richmond	135	33	6	....	153	8	1	1	1	....	....	....	....	....	12
Inverness	146	30	10	....	125	10	5	4	2	4	....	....	1	....	79
Victoria	97	19	6	....	140	3	....	....	....	....	....	....	....	....	.....
Cape Breton County	243	18	4	7	750	...	6	4	1	5	....	....	1	....	.....
Total	2164	436	70	26	2388	50	28	17	22	13	....	....	2	....	316
Prince Edward Island.															
P. E. I. Superintendency	287	51	23	23	240	7	9	12	6	2	....	....	....	....	65
British Columbia.															
Cowichan Agency	1945	548	203	137	2415	36	123	63	187	8	1	8	7	1	.....
West Coast "	2834	426	....	....	13	....	1	....	....	....	....	....	....	....	.....
Kwawkewlth "	1597	218	2	....	11	2	....	....	....	....	....	....	....	....	.....
Lower Fraser "	4177	1236	313	316	3696	91	114	92	83	8	....	1	10	3	1944
Williams Lake "	1878	402	....	174	1257	40	102	36	25	....	9	1	28	....	535
Kamloops "	2801	470	195	....	1421	23	130	115	48	1	18	....	11	....	3375
Okanagan "	558	95	81	....	1058	3	58	22	13	....	8	1	6	4	960
Kootenay "	581	179	10	15	319	13	45	15	15	....	....	....	4	....	31
North-west Coast Agency	4025	899	5	20	131½	17½	....	....	....	....	....	....	....	....	829
Babine and Upper Skeena River Agency	2800	796	....	61	178	23	....	....	....	....	....	....	....	....	6040
Total	23196	5269	809	723	10499½	248½	573	343	371	17	36	11	66	8	13714

*3 bushels of onions and 2 barrels of apples.

STATEMENT No. 2.

Industrial Statistics—*Continued.*

PROPERTY.							GRAIN AND ROOTS HARVESTED.										FISH, FURS AND OTHER INDUSTRIES.
Horses.	Cows.	Oxen.	Bulls.	Sheep.	Pigs.	Number of young stock.	Wheat.	Oats.	Peas.	Barley.	Corn.	Other grain.	Potatoes.	Turnips.	Beans.	Other roots.	Hay.	Value.
							Bus.	Bus.	Bus	Bus	Bus	Bus	Bus.	Bus	Bus	Bus	Tons.	$ cts.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	.....	.....	.....	.....	500 00
.....	2	1	...	.....	2	1	.....	.....	.....	.....	.....	.....	95	15	7	28	5	20 00
.....	.....	.....	.....	.....	.....	4	....	50	.....	.....	.....	15	700	.....	...	....	80	8,060 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....
2	1	...	...	...	2	1	....	20	.....	.....	.....	15	100	.....	.....	.....	13	750 00
3	17	10	...	22	11	28	.....	80	80	45	....	10	365	.....	...	....	108	238 00
2	2	...	...	...	....	2	.....	.....	.....	.....	.....	.....	180	.....	.....	.....	.....	450 00
7	8	...	...	...	....	3	.....	360	.....	.....	.....	.....	500	.....	..	....	50	.....
.....	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	60	.....	.....	.....	4½	600 00
1	2	...	...	....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4½	1,260 00
1	4	...	1	....	1	1	....	...	.....	.....	.....	.....	700	.....	.....	.....	4	6,175 00
...	2	1	...	....	1	2	.....	78	.....	.....	.....	.....	630	.....	.....	.....	34	1,900 00
2	10	2	...	.....	....	10	.....	80	.....	.....	.....	.....	250	.....	.....	.....	.....	900 00
4	32	...	4	....	1	25	..	105	....	15	....	24	1600	.....	.....	.....	190	1,930 00
1	9	...	1	9	1	10	.....	.....	.....	2	.....	.....	275	.....	.....	.....	45	825 00
9	16	12	2	25	1	10	.....	.....	.....	40	.....	.....	1000	.....	...	.....	500	7,140 00
32	105	26	8	56	21	98	.....	793	80	102	....	64	6555	15	7	28	1038	30,748 00
15	11	2	1	13	2	12	321	803	....	....	3	....	1913	.....	.....	.....	22	6,100 00
401	351	92	19	680	113	571	100	50000	200	...	.....	.....	1000	.....	...	....	800	160,000 00
20	5	...	...	40	....	9	.....	.....	.....	.....	.....	.....	1700	.....	.....	.....	.....	163,050 00
.....	4	...	1	....	55	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38,175 00
708	752	150	30	229	2101	473	1872	6851	3604	1686	567	....	11185	.....	.....	.....	1439	90,035 00
2723	799	...	29	....	546	187	4942	5105	24	670	....	....	6580	.....	7	....	1199	29,680 00
2402	448	...	8	1	452	309	2911	7082	469	278	273	250	10716	....	233	....	1200	92,575 00
2350	910	...	...	....	359	240	2906	176	....	.....	.....	.....	2500	.....	.....	.....	300	16,355 00
1477	307	55	21	....	....	302	365	2450	160	....	.....	.....	1370	.....	.....	.....	105	3,300 00
33	7	...	...	....	10	12	.....	.....	.....	.....	.....	.....	4850	1065	....	tons 13	23	317,080 00
325	167	41	16	....	....	54	... ..	.....	....	....	.....	.....	2205	.....	.....	.....	18½	104,450 00
10439	3750	338	124	950	3636	2164	13096	71664	4457	2634	840	250	42106	1065	240	13	5084½	1,014,700 00

TABULAR

AGRICULTURAL and

PROVINCE, AGENCY OR BAND.	Resident Indian Population.	IMMOVABLE PROPERTY, LAND CULTIVATED AND FRESH LAND PLOUGHED.					PERSONAL									
		Houses.	Barns.	Stables.	Land Cultivated.	Land newly broken up.	Ploughs.	Harrows.	Wagons.	Carts.	Fanning mills.	Threshing machines. Binders.	Mowing machines.	Reapers.	Number of other implements.	Horses.
Manitoba and North-west Territories.					Acres.	Acres.										
F. Ogletree, Agt., Tr'ty No. 1.	499	54	2	22	469	20	18	17	6	60	2	2	5	..	110	70
A. M. Muckle " " 1.	1,791	414	..	302	807	34	61	72	41	30	4	..	75	..	1,145	129
H. Martineau " " 2.	1,044	421	7	184	223	26	29	24½	17	105	..	..	13	..	17	166
R. J. N. Pither, Agt., Tr'ty No. 3.	1,086	471	34	.....	104	7	11	13	...	...	...	...	...	...	583	36
F.C.Cornish, Agt., Tr'ty No.3.	887	212	..	41	81½	9½	14	13	...	...	...	...	...	...	246	40
*John McIntyre, Agt., Tr'ty No. 3.	955	344	4	11	120½	21½	15	15	...	...	...	...	...	...	667	.....
Touchwood Hills Agency, Tr'ty No. 4.	836	197	..	73	474	.....	62	21	12	42	..	..	4	1	910	1
Muscowpetung's Ag'cy, Tr'ty No. 4.	678	251	..	100	527	40	91	44	62	35	4	..	26	3	425	471
Birtle Agency, Treaty No. 4.	957	127	2	105	1,342	51	88	57	19	42	7	..	3	.	1,420	241
Swan River (Fort Pelly), Tr'ty No. 4.	651	70	..	68	134⅜	26	35	22	32	30	3	..	14	..	452	143
File Hills Ag'cy, Tr'ty No. 4.	280	53	..	91	164½	.....	45	18	14	12	2	..	4	1	559	95
Assiniboine " " 4.	238	107	..	37	490	70	35	8	13	9	..	..	1	2	39	58
Crooked Lakes " " 4.	606	107	..	92	686	52	80	40	9	26	4	1	4	..	589	190
Moose Mountain Ag'cy, Tr'ty No. 4.	237	115	..	53	414½	26	30	16½	12	11	1	..	2	1	639	65
A. Mackay, Agt., Tr'ty No. 5.	2,116	539	..	139	207	21½	48	65	1	...	...	...	...	...	1,852	.....
Jos. Reader " " 5.	1,069	264	..	88	61	5	24	22	...	1	2	...	...	...	838	12
SaddleLake Ag'cy, Tr'y No. 6.	701	153	..	106	901	85	68	35	7	35	2	1	2	1	862	196
Hobbema " " 6.	516	70	..	65	923	124	90	42	7	48	4	2	6	3	1,126	195
Battleford " " 6.	861	200	..	173	324½	11	119	59	24	26	4	..	17	..	919	287
Onion Lake " " 6.	673	108	..	76	630	9	44	15	16	15	2	1	3	..	941	113
Duck Lake " " 6.	627	96	28	100	702	101	69	32	19	27	4	..	11	2	1,403	171
Edmonton " " 6.	736	163	..	142	1,011	177	36	26	11	9	4	1	4	..	186	177
Carlton " " 6.	1,352	123	20	107	617	91	77	41	8	31	1	..	3	..	813	154
Sarcee " " 7.	236	77	..	2	76	3	.....	.....	.....	.....	.....	.....	.....	.....	84	463
Blood " " 7.	1,427	344	..	29	304	52	46	12	41	1	2	..	6	1	1,896	1,828
Blackfoot " " 7.	1,267	472	..	16	207½	18	40	19	13	4	2	1	4	..	985	1,645
Piegan " " 7.	781	176	..	39	265	16	30	6	40	...	1	..	8	..	290	567
Stony " " 7.	576	132	..	47	97	.. ..	9	8	4	5	..	..	1	..	226	530
Total.....	23,683	5,860	97	2,308	12,363¾	1,096½	1,314	764	428	604	55	9	216	15	20,222	8,043

*739 bushels of rice.

JOHN MCGIBB,
Clerk of Statistics.

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, 30th June, 1895.

STATEMENT No. 2.

Industrial Statistics—*Continued.*

Property.						Grain and Roots Harvested.												Fish, Furs and other Industries.
Cows.	Oxen.	Bulls.	Sheep.	Pigs.	Number of young stock	Wheat.	Oats.	Peas.	Barley.	Corn.	Beans.	Other grain.	Potatoes.	Turnips.	Carrots.	Onions.	Other Roots.	Hay.	Value.
						Bus.	Bus.	Bus.	Bus.	Bus.	Bus.	Bus.	Bus.	Bus.	Bus.	Bus.	Bus.	Tons.	$ cts.
16	30	2	...	5	25	4,429	.....	..	.....	.....	..	..	420	.....	...	.	...	190	4,925 00
330	243	12	...	171	481	1,000	2,300	55	2,510	410	30	..	12,050	.....	...	...	...	4,320	30,400 00
323	131	35	8	20	551	.....	155	..	207	80	..	..	3,916	91	52	39	...	2,349	7,507 00
35	23	4	...	...	18	....	.....	..	.....	322	..	3	1,665	.....	...	...	...	190	11,035 00
24	26	7	...	...	26	....	265	..	.....	1,015	..	..	4,435	.....	...	...	...	390	16,210 00
15	3	4	...	...	8	.....	....	..	.....	38	..	..	2,542	114	43	..	...	38	15,668 00
240	81	7	...	...	365	50	.....	..	.....	.....	..	..	375	.....	...	...	...	1,933	10,468 00
158	156	4	...	...	235	56	29	..	.....	38	..	..	213	.....	...	...	...	1,801	12,375 00
188	131	7	48	...	254	9,261	710	..	.....	550	..	..	1,666	.....	...	...	...	2,297	14,421 00
295	116	13	146	...	405	40	170	..	476	.....	..	..	1,127	.....	...	...	...	2,092	11,601 00
204	53	7	11	2	303	.....	.....	..	.....	.....	..	..	20	.....	...	...	...	1,056	2,200 00
24	54	...	64	...	56	520	.....	..	.....	.....	..	..	748	1,142	212	...	...	650	837 00
139	114	5	34	20	403	1,848	100	..	15	.....	..	..	786	.....	...	...	...	1,336	6,880 00
65	59	3	...	...	112	1,703	130	..	120	.....	..	..	925	977	80	...	...	630	2,925 00
130	54	5	...	...	134	.....	.....	..	28	.....	..	..	4,509	.....	...	...	...	274	30,665 00
100	24	...	...	...	153	.....	.....	..	.....	.....	..	..	3,045	.....	...	...	...	319	16,989 00
315	78	2	...	...	474	744	56	..	893	.....	..	..	975	.....	...	...	284	2,160	8,072 00
226	108	...	...	...	416	3,718	448	..	1,160	.....	..	..	1,800	1,450	...	...	...	905	6,550 00
432	267	16	154	...	650	934	31	..	4	.....	..	..	630	458	...	3	...	4,685	2,244 00
193	80	2	162	6	462	205	.....	..	1,502	.....	..	..	1,050	300	...	...	...	1,900	10,080 00
277	150	21	...	8	501	2,442	1,966	..	250	.....	..	..	1,879	.....	...	...	...	2,096	5,070 00
162	95	3	79	59	201	1,875	1,860	..	2,510	.....	..	..	3,529	.....	...	...	...	1,754	10,157 00
228	134	9	...	1	360	1,417	589	..	351	.....	..	..	1,572	.....	...	...	...	2,031	4,602 00
5	4	..	...	...	3	95	110	..	.....	.....	..	..	57	325	35	...	...	180	1,725 00
62	25	2	...	...	130	19	699	..	.....	.....	..	..	546	.....	...	...	...	500	7,001 00
17	....	...	...	...	445	14	196	..	30	.....	..	..	548	.....	...	...	...	440	3,769 00
288	30	11	...	...	548	.....	324	..	93	.....	..	..	930	.....	...	...	...	347	4,532 00
182	6	8	82	...	523	.....	.....	..	.....	.....	..	..	181	.....	...	...	...	115	4,950 00
4,673	2,275	189	788	292	8,242	30,370	10,048	55	10,148	2,453	30	3	52,139	4,857	422	42	284	36,978	263,918 00

HAYTER REED,
Deputy Supt. General of Indian Affairs.

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
ONTARIO.				
Alnwick	Alnwick	Alnwick	A. G. Millard	Methodist
Back Settlement	Caradoc	Western No. 2	Elsie Cobban	Undenominational
Bear Creek	"	" No. 2	Thomas Annett	"
Buzwahs	Manitoulin Island.	Manitowaning	Ignatius Gabow	Roman Catholic
Cape Croker	Cape Croker	Cape Croker	Janet Miller	Undenominational
Christian Island	Christian Island	Penetanguishene	John Lawrence	Methodist
Fort William (boys)	Fort William	Northern No. 4	E. S. Donahue	Roman Catholic
" (girls)	"	" No. 4	Sister M. Ambrose	"
" (orphanage)	"	" No. 4	Sister St. Helen of the Cross	"
French Bay	Saugeen	Saugeen	Helen Cameron	Undenominational
Garden River	Garden River	Sault Ste. Marie	A. E. Wilding	Episcopal
"	"	"	S. Lamorandière	Roman Catholic
Georgina Island	Georgina Island	Georgina Island	Robert Mayes	Methodist
Gibson	Gibson	Parry Sound	E. Hyndman	"
Golden Lake	Golden Lake	Golden Lake	M. E. Quinn	Roman Catholic
Hiawatha	Rice Lake	Rice Lake	J. A. Windsor	Methodist
Jack Fish Island	Jack Fish Island	Northern No. 4	J. A. Blais	Roman Catholic
Kettle Point	Kettle Point	Western No. 1	E. Jane Little	Undenominational
Lake Helen	Lake Helen	Northern No. 4	Elizabeth Lahaye	Roman Catholic
Lower Muncey	Caradoc	" No. 2	John Collins	Episcopal
Mattawa	Mattawa		Sister St. Monica	Roman Catholic
Miller	Henvey Inlet	Parry Sound	David Craddock	Undenominational
Mississauga	Mississagua	Manitowaning	Louisa Dyke	Roman Catholic
Mohawk Institute	At Brantford	Grand River	Rev. R. Ashton	Undenominational
Moraviantown	Moravian	Western No. 3	George Grant	"
Moravian Mission	"	" No. 3	Dora Miller	Moravian
Mount Elgin Institute	Caradoc	" No. 2	Rev. W. W. Shepherd	Methodist
New Credit	New Credit	New Credit	Norman F. Black	Undenominational
Nipissing	Nipissing	Parry Sound	Maggie R. Tennant	"
Oneida No. 1	Oneida	Western No. 2	Susie Emerson	Methodist
" No. 2	"	" No. 2	Mary J. Chambers	Episcopal
" No. 3	"	" No. 2	C. A. Vollick	Methodist
Pays Plat	Pays Plat	Northern No. 4	Alice Barker	Roman Catholic
Pic River	Pic River	" No. 4	Mrs. J. H. McKay	"
Port Arthur		" No. 4	Sister M. Regina	"
Port Elgin	Cape Croker	Cape Croker	Reuben Waugh	Undenominational
Rama	Rama	Rama	J. Egan	Methodist
Red Rock	Red Rock	Northern No. 4	John Deschamp	Roman Catholic
River Settlement	Caradoc	Western No. 2	Joseph Fisher	Undenominational
Ryerson	Parry Island	Parry Sound	Mary Pace	"
Sagamook	Spanish River	Manitowaning	H. Atchitawance	Roman Catholic
Saugeen	Saugeen	Saugeen	A. J. Latornell	Methodist
Scotch Settlement	"	"	John Burr	Undenominational
Serpent River	Serpent River	Manitowaning	Mary Cada	Roman Catholic
Shawanaga	Shawanaga	Parry Sound	Mary Yates	Undenominational
Sheguiandah	Sheguiandah	Manitowaning	James Keatley	Episcopal

STATEMENT No. 3.

which Returns have been received) for the Year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total Number on Roll.	Average Daily Attendance.	Classes of Study.						Industries.						General Remarks.
						Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	Farmer.	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Tinsmith.	
$ cts.																		
250 00	Band and Methodist	18	16	34	17	15	12	5	2									Half salary paid by Methodist Missionary Society and half by band.
200 00	Band	15	12	27	14	14	5	5	3									
200 00	"	9	8	17	9	5	5	4	2	1								
200 00	"	8	6	14	7	6	4	3	1									
300 00	"	17	5	22	12	12	2	3	4	1								
275 00	Band and Methodist	22	9	31	14	19	2	3	6	1								
300 00	Appropriation	13		13	11	7	4	2										
200 00	"		15	15	10	6	5	3	1									
500 00	"	9	15	24	22	6	13	4										
300 00	Band	14	17	31	16	16	4	7	3	1								
300 00	"	26	14	40	13	29	8	1	1		1							
300 00	Band and appropriation	25	26	51	28	32	10	8	1									
300 00	Band and Methodist	11	7	18	10	5	2	7	2	2								
250 00	Methodist and School Fund	16	10	26	13	13	5	3	4	1								Half salary paid by Methodist Missionary Society and half by School Fund.
300 00	School Fund	10	7	17	10	7	7	2		1								
250 00	Band and Methodist	10	8	18	8	7	4	4	3									
250 00	School Fund	11	5	16	8	13	2	1										
250 00	Appropriation	10	8	18	8	11	4	2	1									
250 00	"	4	3	7	4	6	1											
200 00	School Fund	15	8	23	13	10	5	7										
100 00	"	13	11	24	19	5	11	4	4	1								
250 00	Band and School Fund	9	16	25	12	15	5	5										
250 00	School Fund	14	10	24	14	15	5	3	1									
5,460 00	Appropriation	48	67	115	105	9	13	21	24	26	18	33	4					Boys taught farming and carpentering, and girls sewing, knitting, cooking and general housework.
350 00	Band	19	19	38	22	29	5	4										
.....	Moravian Missionary Society	5	20	25	21	10	7	8										
5,100 00	School Fund and Appropriation	57	62	119	86	26	18	26	14	9	2	37	1	4				
325 00	Band	28	16	44	26	18	12	8	4	2								
250 00	"	7	10	17	8	11	2		3	1								
300 00	Methodist and School	20	20	40	20	18	13	7	2									
200 00	Episcopal and School	7	8	15	8	10	4	1										$50 paid by department.
250 00	Methodist and School	26	21	47	27	25	13	5	4									
250 00	School	8	8	16	9	13	3											
250 00	"	10	7	17	9	9	5	3										
	"		2	2	2	2												Department pays for Indian pupils at this white school.
300 00	Band	10	7	17	6	10	2	1	3	1								
250 00	Methodist and Band	14	11	25	19	14	7	3	1									
250 00	Appropriation	5	6	11	7	9	1	1										
200 00	Band	16	8	24	13	13	5	4	2									
250 00	"	9	3	12	5	3	6	1	1	1								
250 00	Appropriation	11	7	18	5	11	6	1										
300 00	Band and Methodist	14	10	24	14	11	8	2	3									
300 00	Band	15	11	26	16	11	7	6	2									
250 00	School	8	7	15	5	7	7	1										
250 00	Band and appropriation	14	14	28	15	18	7	3										
300 00	Band	12	8	20	10	12	4	3	1									

NOTE—For the Industrial and Boarding Schools the maximum attendance, and for the Day Schools the average attendance is given.

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
ONTARIO—*Continued.*				
Shingwauk Home	.....	ault Ste. Marie..	Geo. Ley King.	Episcopal.....
Sheshegwaning.....	Sheshe w ning....	Manitowaning....	Mrs. has. Rousseau	Roman Catholic..
Sidney Bay.....	Cape Croker.....	Cape Croker. ...	Isabe a McIver	Undenominational
Six Nation, No. 1.....	Six Nation.	Grand River.....	Frances Davis.....	" .
" 2.	"	"	K. Maracle.....	" .
" 3.....	"	"	Lizzie Weatherell...	" .
" 5.	"	"	Elam Bearfoot.....	" .
" 6.....	"	"	John Lickers	" .
" 7.....	"	"	Sarah C. Russell....	" .
" 9.....	"	"	Mary J. Scott.....	" .
" 10.....	"	"	Sarah Davis.....	" .
" 11.....	"	"	Peter F. Adams....	" .
Skene.....	Parry Island.....	Parry Sound.....	Lizzie Hayes.....	" .
South Bay	South Bay.....	Manitowaning...	Elizabeth Proulx...	Roman Catholic..
Spanish River.....	Spanish River....	"	Carrie Morley	Episcopal.....
Stony Point.....	Stony Point	Western, No. 1...	Annie S. Vance	Undenominational
St. Clair.....	Sarnia.....	" 1...	F. E. Welsh.....	Methodist.....
Sucker Creek.....	Sucker Creek.	Manitowaning....	Lucy E. Shepherd..	Episcopal.....
Thessalon.....	Thessalon	"	Mrs. Jos. Bernard..	Roman Catholic..
Thomas.....	Six Nation.	Grand River.....	John Millar.....	Undenominational
Tyendinaga (Eastern)....	Tyendinaga.....	Tyendinaga.....	Helen Demorest....	" .
" (Western)....	"	"	Maggie Allan... ...	" .
" (Central)....	"	"	Wm. Tedman.....	" .
" (Mission)....	"	"	Josephine Good.....	Episcopal.....
Walpole Island, No. 1. ..	Walpole Island....	Walpole Island...	Albert Sahguj.....	" .....
" 2. ..	"	" ...	Arthur Miskokamon	Methodist.....
" 3. ..	"	" ...	Wm. Peters..... ...	Undenom national
West Bay.....	West Bay.....	Manitowaning....	Sarah Bernard.....	Roman Catholic..
White Fish Lake.....	White Fish Lake..	"	Celina Lemoine.....	" ..
" River.....	" River.	"	Sophia Nahwegahbow	Episcopal.....
Wikwemikong Day (Boys)	Manitoulin Island, (unceded).....	"	Thos. F. Stakum ...	Roman Catho ..
" " (Girls)	" .	"	Margaret Kelcher...	" ..
" Boys' Industrial	" .	"	Rev. J. Paquin.	" ..
" Girls' " .	" .	"	Elizabeth Miller....	" ..
Wikwemikongsing.....	Wikwemikongsing	"	Mary Lamorandière.	" ..

STATEMENT No. 3—*Continued.*

which Returns have been received) for the Year ended 30th June, 1895.

Yearly salary or grant provided.	From what fund paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total number on Roll.	Average daily attendance.	Classes of Study.						Industries.						General Remarks.
						Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	Farmer.	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Tinsmith.	
$ cts.																		
6,000 00	School and appropriation	69	36	105	74	18	23	18	16	5	4	3	4	..	4	..	..	Farming, carpentering, shoemaking and tailoring taught to the boys. Girls learning sewing, knitting and housework.
250 00	Band	14	11	25	10	19	3	3	..	..	..	..	..	..	..	..	..	
300 00	"	18	8	26	18	8	6	3	9	..	..	..	..	..	..	..	..	
.....	Band, New England Co. and School	14	15	29	18	12	7	7	3	..	..	..	..	..	..	..	..	The band contributes $1,500; school fund, $450, and the New England Company, $1,000 per annum for ten board schools.
.....	"	22	24	46	29	20	9	4	7	5	1	..	..	..	..	..	..	
.....	"	20	16	36	19	23	7	3	2	1	..	..	..	..	..	..	..	
.....	"	24	16	40	23	19	3	6	7	4	1	..	..	..	..	..	..	
.....	"	9	12	21	12	6	8	4	2	1	..	..	..	..	..	..	..	
.....	"	27	29	56	29	34	13	4	4	1	..	..	..	..	..	..	..	
.....	"	14	11	25	17	12	6	5	2	..	..	..	..	..	..	..	..	
.....	"	26	16	42	22	20	11	5	4	2	..	..	..	..	..	..	..	
.....	"	19	23	42	19	28	10	3	..	1	..	..	..	..	..	..	..	
200 00	Band	3	5	8	4	4	..	1	3	..	..	..	..	..	..	..	..	
200 00	do	10	9	19	9	15	4	..	..	..	..	..	..	..	..	..	..	
200 00	Appropriation	9	7	16	6	9	4	3	..	..	..	..	..	..	..	..	..	
200 00	Band	2	8	10	6	3	3	2	2	..	..	..	..	..	..	..	..	
300 00	Band and Methodist	19	18	37	21	11	13	6	2	5	..	..	..	..	..	..	..	
200 00	Band	9	6	15	7	7	6	1	1	..	..	..	..	..	..	..	..	
300 00	Appropriation	10	7	17	10	9	6	1	1	..	..	..	..	..	..	..	..	
362 50	Band	33	28	61	30	24	13	8	10	6	..	..	..	..	..	..	..	
150 00	"	33	18	51	25	31	10	5	3	2	..	..	..	..	..	..	..	
250 00	"	11	10	21	8	8	7	3	1	2	..	..	..	..	..	..	..	
150 00	"	16	25	41	21	16	11	6	6	2	..	..	..	..	..	..	..	
.....	New England Co	22	14	36	17	33	3	..	..	..	..	..	..	..	..	..	..	
200 00	Band and Church of England	25	24	49	21	27	17	4	1	..	..	..	..	..	..	..	..	
250 00	Methodist and appropriation	24	16	40	23	17	9	8	5	1	..	..	..	..	..	..	..	
300 00	Band	16	16	32	17	13	8	4	7	..	..	..	..	..	..	..	..	
200 00	"	26	15	41	14	33	8	..	..	..	..	..	..	..	..	..	..	
200 00	Appropriation	5	12	17	11	9	2	4	2	..	..	..	..	..	..	..	..	
200 00	School	7	7	14	9	11	3	..	..	..	..	..	..	..	..	..	..	
300 00	Appropriation	32	..	32	13	21	7	3	1	1	..	..	..	..	..	..	..	
300 00	"	..	30	30	13	18	7	3	1	..	..	..	..	..	..	..	..	
2,700 00	"	47	..	47	44	15	6	14	11	..	..	2	3	..	..	1	2	
1,800 00	"	..	31	31	30	4	7	9	7	3	..	..	..	..	..	..	..	
200 00	"	12	5	17	7	14	2	1	..	..	..	..	..	..	..	..	..	

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
QUEBEC.				
Becancour	Becancour	Becancour	Rebecca Dubois	Roman Catholic
Caughnawaga, boys	Caughnawaga	Caughnawaga	Frank M. Jacobs	"
" girls	"	"	Anna Hebert	"
"	"	"	Rev. J. A. Dionne	Methodist
Chenail	St. Regis	St. Regis	Margaret McKillop	Roman Catholic
Cornwall Island	"	"	Mrs. Annie Back	"
"	"	"	Louis Benedick	Methodist
Lake St. John, Point Blue	Point Blue	Point Blue	Eugene Roy	Roman Catholic
Lorette	Lorette	Lorette	Josephine Dubeau	"
Maniwaki	Maniwaki	River Desert	A. J. Doyle	"
Maria	Maria	Maria	Malvina Cyr	"
Oka (Country)	Oka	Caughnawaga	Mary A. Cooke	Methodist
" (Village)	"	"	Georgina Higgins	"
Restigouche	Restigouche	Restigouche	Marie E. Audet	Roman Catholic
St. Francis	Abenakis	St. Francis	Sister St. Lawrence	"
"	"	"	Rev. H. O. Loiselle	Episcopal
St. Regis (Village)	St. Regis	St. Regis	Mrs. Mary J. Powell	Roman Catholic
" (Island)	"	"	Christina McKillop	"
Temiscamingue	Temiscamingue	Temiscamingue	Marion J. Legge	"
" Mission	"	"	Sister St. Camille	"
NOVA SCOTIA.				
Bear River	Bear River	Bear River (No. 13)	John L. DeVany	Roman Catholic
Cow Bay (Cole Harbour)	Cole Harbour	District No. 5	Cath. F. Langley	"
Eskasoni	Eskasoni	District No. 13	Roderick McMillan	"
Middle River (Wagamatcook)	Middle River	Victoria Co	Mary A. McEachen	"
New Germany	Lunenburg	Lunenburg	Annie S. Taylor	"
Salmon River (St. Ann's)	Salmon River	District No. 9	Daniel A. Campbell	"
Shubenacadie	Indian Brook	Shubenacadie	Robert J. Logan	"
Whycocomagh	Whycocomagh	District No. 11	Patrick Murphy	"
NEW BRUNSWICK.				
Burnt Church (Church Point)	Church Point	North-eastern	Annie M. Borden	Roman Catholic
Eel Ground	Eel Ground	"	Michael Flinne	"
Kingsclear	Kingsclear	Western	Frances McGinn	"
St. Mary's	St. Mary's	"	Maria J. Rush	"
Tobique	Tobique	"	Edith O'Brien	"
PRINCE EDWARD ISLAND.				
Lennox Island	Lennox Island	P. E. Island	C. J. Poirier	Roman Catholic

STATEMENT No. 3—*Continued.*

which Returns have been received) for the Year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total Number on Roll.	Average Daily Attendance.	Classes of Study. Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	General Remarks.
$ cts.												
80 00	School and appropriation....	5	3	8	6	1	2	2	2	1	..	
450 00	Appropriation	96	..	96	39	52	15	9	4	16	..	
400 00	"	..	90	90	52	25	10	17	16	13	9	
250 00	Appropriation and Methodist	7	10	17	9	11	5	1	..	..	..	
200 00	Band.....	10	13	23	6	16	7	..	..	..	..	
200 00	"	11	10	21	11	13	4	4	..	..	..	
200 00	Band and Methodist	..	..	..	..	..	..	..	..	..	..	No returns have been received for 1894-95.
150 00	Band.....	11	11	22	15	6	6	7	3	..	..	
200 00	Appropriation..	31	31	62	42	11	10	13	14	8	6	
300 00	Band.....	6	8	14	6	6	2	3	3	..	..	
150 00	"	13	13	26	17	6	6	8	6	..	..	
200 00	Appropriation and Methodist	7	8	15	6	7	5	2	1	..	..	
250 00	" "	15	10	25	12	9	7	7	2	..	..	
200 00	Appropriation	24	22	46	18	27	12	4	3	..	..	
290 00	Band.....	18	17	35	33	10	6	4	5	7	3	
250 00	"	12	7	19	10	13	3	3	..	..	..	
200 00	"	21	16	37	11	22	10	4	1	..	..	
200 00	"	9	4	13	7	7	3	3	..	..	..	
250 00	Appropriation	20	25	45	28	24	14	5	1	1	..	
100 00	"	1	4	5	4	2	1	2	..	..	..	
300 00	Appropriation	10	7	17	11	5	3	2	4	1	2	
200 00	"	4	6	10	7	4	2	3	1	..	..	
200 00	"	9	9	18	6	..	7	7	3	1	..	
200 00	"	6	7	13	5	5	4	4	..	..	..	
300 00	"	8	3	11	8	1	2	1	1	3	3	
200 00	"	16	13	29	17	16	8	4	1	..	..	
240 00	"	17	8	25	12	10	10	4	1	..	..	
200 00	"	14	9	23	11	17	4	2	..	..	..	
200 00	Appropriation	9	7	16	8	10	3	2	1	..	..	
250 00	"	9	5	14	6	8	3	2	1	..	..	
250 00	"	14	7	21	17	5	7	5	2	1	1	
250 00	"	11	8	19	11	8	5	1	1	2	2	
240 00	"	12	20	32	18	23	2	..	6	1	..	
300 00	Appropriation	24	7	31	13	9	5	6	9	2	..	

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
BRITISH COLUMBIA.				
Alberni	Treshat	West Coast	Margaret Minnes	Presbyterian
Aiyaush	Gitlakdamiks	North-west Coast	J. B. McCullagh	Episcopal
Alert Bay Industrial	Alert Bay	Kwawkewlth	A. W. Corker	"
Bella Bella	Bella Bella	North-west Coast	K. Shelney	Methodist
Cape Mudge	Cape Mudge	Kwawkewlth	R. J. Walker	"
Coqua Leetza Home		Fraser River	Rev. E. Robson	"
Gwayasdums	Gwayasdums	Kwawkewlth	E. Wm. Brotchie	Episcopal
Hazelton	Giatamahks	Babine	E. C. Stephenson	"
Kamloops Industrial		Kamloops and Okanagan	Rev. A. M. Carion	Roman Catholic
Kincolith	Kincolith	North-west Coast	W. E. Collison	Episcopal
Kitkahtla (Lac Lan)	Kitkahtla	"	Robert W. Gard	"
Kootenay Industrial		Kootenay	Rev. N. Coccola	Roman Catholic
Kuper Island Industrial		Cowichan	Rev. G. Donckele	"
Kyuquot	Kyuquot	West Coast	H. Moulman	"
Lak-Alsap (Naas River)	Lac-Alsap	North-west Coast	Jessie Crosby	Methodist
Massett	Massett	"	John H. Keen	Episcopal
Metlakahtla Industrial		"	J. R. Scott	Undenominational
" Day		"	Florence Applegarth	"
Nanaimo	Nanaimo	Cowichan	R. H. Cairns	Methodist
Nimkish (Alert Bay)	Nimkish	Kwawkewlth	Elizabeth Hall	Episcopal
Nitinaht	Clo-oose	West Coast	Wm. J. Stone	Methodist
Port Essington	Skeena	North-west Coast	Kate Tranter	"
Port Simpson Girls' Home	Tsimpshean	"	H. M. Paul	"
" Day	"	"	Chas. M. Richards	"
Songhees	Songhees	Cowichan	Sister M. Berchmans	Roman Catholic
St. Mary's Mission Boarding		Fraser	Rev. E. M. Bunnoz	"
Uclulet	Itedsu	West Coast	John W. Russell	Presbyterian
William's Lake Industrial		William's Lake	Rev. J. M. J. Lejacq	Roman Catholic
Yale (All Hallows) Boarding		Fraser	Amy Sister Superior	Episcopal

STATEMENT No. 3—*Continued.*

which Returns have been received) for the Year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund Paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total Number on Roll.	Average Daily Attendance.	Classes of Study.						Industries.						General Remarks.
						Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	Farmer.	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Printer.	
$ cts.																		
300 00	Appropriation	11	17	28	19	14	8	4	2	..	..	..	..	..	..	..	..	
300 00	"	6	12	18	11	14	4	..	..	..	..	..	..	..	..	..	..	
4,550 00	"	19	..	19	12	12	3	1	..	..	..	..	4	..	..	..	..	Boys taught gardening and carpentering.
300 00	"	19	15	34	8	17	10	5	2	..	..	..	..	..	..	..	..	
300 00	"	5	11	16	6	12	4	..	..	..	..	..	..	..	..	..	..	
2,210 00	"	57	40	97	76	33	21	19	10	5	..	26	4	4	..	3	..	Boys taught trades as shown; girls taught housework and gardening.
300 00	"	29	18	47	8	45	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	15	20	35	8	24	7	3	1	..	..	..	..	..	..	..	..	
3,250 00	"	15	12	27	25	2	1	13	6	2	1	13	9	..	..	..	..	Boys taught farming and carpentering; girls taught housework.
300 00	"	12	15	27	17	10	9	4	4	..	..	..	..	..	..	..	..	
300 00	"	24	19	43	22	26	11	6	..	..	..	..	..	..	..	..	..	
6,500 00	"	25	25	50	50	11	19	9	10	1	..	10	4	..	..	..	..	Boys taught farming and carpentering; girls sewing and housework.
3,900 00	"	19	14	33	27	4	7	6	9	4	1	13	..	7	..	..	..	Girls taught sewing, knitting and housework, and boys farming and shoemaking.
300 00	"	17	12	29	16	29	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	23	15	38	13	28	3	6	..	1	..	..	..	..	..	..	..	
300 00	"	9	10	19	6	11	4	4	..	..	..	..	..	..	..	..	..	
5,640 00	"	31	..	31	16	6	5	6	..	5	4	..	7	..	..	..	..	Boys taught farming.
300 00	"	12	31	43	16	8	5	7	4	8	11	..	..	..	..	..	..	
300 00	"	12	15	27	10	16	8	2	1	..	..	..	..	..	..	..	..	
300 00	"	7	17	24	11	10	10	4	..	..	..	..	..	..	..	..	..	
300 00	"	11	18	29	11	26	2	..	1	..	..	..	..	..	..	..	..	
300 00	"	11	12	23	10	15	4	3	1	..	..	..	..	..	..	..	..	
1,200 00	"	..	32	32	17	8	6	6	4	2	..	..	..	..	..	..	..	The pupils taught sewing, housework and gardening.
300 00	"	41	32	73	26	30	18	17	5	3	..	..	..	..	..	..	..	
300 00	"	10	11	21	13	13	5	1	1	..	1	..	..	..	..	..	..	
2,400 00	"	25	38	63	55	26	16	6	8	3	..	16	..	3	..	..	..	Girls taught sewing, knitting and housework, and the boys farming and shoemaking.
300 00	"	25	12	37	12	37	..	..	..	..	..	..	..	..	..	..	..	
4,550 00	"	22	19	41	37	11	9	11	8	..	..	4	4	..	..	..	2	Girls taught sewing and housework, and the boys farming, carpentering and printing.
1,500 00	"	..	25	25	20	11	1	3	4	3	3	..	..	..	..	..	..	

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
MANITOBA.				
Assabasca	Rainy River	Rat Portage	R. B. Grant	Episcopal
Beren's River	Beren's River	Beren's River	Jos. H. Lowes	Methodist
Big Eddy	Pas	Pas	Louis Cochrane	Episcopal
Black River	Black River	Beren's River	Murdoch Johnson	"
Broken Head	Broken Head	Clandeboye	M. B. Edwards	"
Chemawawin	Chemawawin	Pas	F. Lamb	"
Coutcheeching	Coutcheeching	Coutcheeching	W. A. Tucker	Roman Catholic
Crane River	Crane River	Manitowapaw	John Favel	Episcopal
Cross Lake	Cross Lake	Beren's River	John S. Newton	Methodist
Cumberland	Cumberland	Pas	James Settee, jun	Episcopal
Ebb and Flow Lake	Ebb and Flow Lake	Manitowapaw	M. Dumas	Roman Catholic
Fairford (Upper)	Fairford	"	George Bruce	Episcopal
" (Lower)	"	"	Adolphus Cox	"
Fisher River	Fisher River	Beren's River	Fred. G. Stevens	Methodist
Fort Alexander (Lower)	Fort Alexander	Clandeboye	James Miller	Episcopal
" (Upper)	"	"	Donald Flett	"
"	"	"	Marie Vincent	Roman Catholic
Frenchman's Head	Lac Seul	Savanne	A. T. Norquay	Episcopal
Hollow Water River	HollowWaterRiv'r	Beren's River	John Sinclair	"
Islington	Islington	Rat Portage	Richard Cox	"
Jack Head	Jack Head	Beren's River	F. A. Disbrowe	"
Lac Seul	Lac Seul	Savanne	A. R. J. Bannatyne	"
Lake Manitoba	Lake Manitoba	Manitowapaw	Maxime Goulet	Roman Catholic
Lake St. Martin	Lake St. Martin	"	John Moar	Episcopal
Little Forks	Little Forks	Coutcheeching	H. A. George	"
Little Saskatchewan (Sandy Bay)	Little Saskatch'wn	Manitowapaw	F. H. Dobbs	"
Long Sault	Long Sault	Coutcheeching	R. H. Bagshaw	"
Manitou Rapids	Manitou Rapids	"	D. W. Wood	"
Moose Lake	Moose Lake	Pas	W. R. Taylor	"
Muckle's Creek	St. Peter's	Clandeboye	J. McClure Muckle	"
Netley Creek	"	"	J. M. Gow	Roman Catholic
Norway House	Norway House	Beren's River	Albert R. Aldridge	Methodist
Pas	Pas	Pas	Robert Bear	Episcopal
Pine Creek	Pine Creek	Manitowapaw	Rev. A. Chaumont	Roman Catholic
" Boarding	"	"	"	"
Poplar River	Poplar River	Beren's River	Joseph Dargue	Methodist
Portage la Prairie Boarding	Portage la Prairie	Portage la Prairie	Annie Fraser	Presbyterian
Rossville	Norway House	Beren's River	Ronald Strath	Methodist
Sandy Bay	Sandy Bay	Manitowapaw	Thos. Ward	Roman Catholic
Shoal Lake	Pas Mountain	Pas	W. C. Lundie	Episcopal
Stangecoming	Stangecoming	Coutcheeching	Werner Jeurgens	Roman Catholic
St. Boniface Industrial	At St. Boniface	Manitoba	Sister Hamel	"
St. Paul's (Rupert's Land) Industrial	At Middle Church	"	J. B. Ashby	Episcopal
St Peter's, North	St. Peter's	Clandeboye	Mary McLean	"
" South	"	"	R. F. McDougall	"
" East	"	"	J. A. Wilson	"
" Roman Catholic	"	"	R. Chevrefils	Roman Catholic
The Dalles	Rat Portage	Rat Portage	John Kippling	Episcopal

STATEMENT No. 3—*Continued.*

which Returns have been received) for the Year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total Number on Roll.	Average Daily Attendance.	Classes of Study.						Industries.						General Remarks.
						Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	Farmer.	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Tinsmith.	Printer.	
$ cts.																			
300 00	Appropriation	7	11	18	6	10	8	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	22	15	37	12	24	6	3	3	1	..	..	..	..	..	..	..	..	
300 00	"	21	14	35	25	25	6	2	2	..	..	..	..	..	..	..	..	..	
300 00	"	9	11	20	8	14	4	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	9	8	17	7	12	1	3	1	..	..	..	..	..	..	..	..	..	
300 00	"	17	10	27	14	14	9	4	..	..	..	..	..	..	..	..	..	..	
300 00	"	11	9	20	7	13	6	..	1	..	..	..	..	..	..	..	..	..	
300 00	"	8	7	15	13	8	4	3	..	..	..	..	..	..	..	..	..	..	
300 00	"	19	22	41	13	37	2	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	16	11	27	14	24	3	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	10	4	14	8	6	6	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	6	12	18	10	5	2	5	3	3	..	..	..	..	..	..	..	..	
300 00	"	18	15	33	11	20	6	7	..	..	..	..	..	..	..	..	..	..	
300 00	"	34	25	59	31	29	7	11	12	..	..	..	..	..	..	..	..	..	
300 00	"	8	3	11	5	9	2	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	14	15	29	11	16	9	2	2	..	..	..	..	..	..	..	..	..	
300 00	"	13	9	22	14	12	7	3	..	..	..	..	..	..	..	..	..	..	
300 00	"	13	11	24	7	21	1	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	18	11	29	11	27	2	..	..	..	..	..	..	..	..	..	..	..	2 returns.
300 00	"	14	4	18	5	12	6	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	9	9	18	8	16	2	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	17	18	35	16	29	5	1	..	..	..	..	..	..	..	..	..	..	
300 00	"	13	7	20	6	16	2	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	10	8	18	7	12	6	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	11	4	15	5	13	2	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	14	12	26	16	13	8	3	2	..	..	..	..	..	..	..	..	..	
300 00	"	13	12	25	9	19	5	1	..	..	..	..	..	..	..	..	..	..	
300 00	"	14	7	21	6	15	5	1	..	..	..	..	..	..	..	..	..	..	3 returns.
300 00	"	14	10	24	16	19	4	1	..	..	..	..	..	..	..	..	..	..	
300 00	"	8	7	15	9	8	3	4	..	..	..	..	..	..	..	..	..	..	
300 00	"	2	2	4	2	1	3	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	19	19	38	13	32	5	1	..	..	..	..	..	..	..	..	..	..	
300 00	"	21	22	43	26	24	15	4	..	..	..	..	..	..	..	..	..	..	
300 00	"	11	7	18	9	10	4	4	..	..	..	..	..	..	..	..	..	..	One school—day and boarding.
600 00	"	2	8	10	10	5	3	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	28	21	49	16	27	11	11	..	..	..	..	..	..	..	..	..	..	
1,440 00	"	13	18	31	19	6	5	4	4	3	1	..	..	..	..	..	..	..	
300 00	"	29	37	66	21	48	11	4	3	..	..	..	..	..	..	..	..	..	
300 00	"	22	31	53	23	37	10	6	..	..	..	..	..	..	..	..	..	..	
300 00	"	15	12	27	21	21	6	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	12	15	27	16	26	1	..	..	..	..	..	..	..	..	..	..	..	
10,500 00	"	49	52	101	85	37	32	21	8	1	..	12	6	7	..	13	..	..	Girls taught laundry work, sewing, knitting, cooking, &c., and the boys, garden ing and trades, as sho wn.
.....	"	45	36	81	70	17	10	17	15	20	..	13	8	3	..	5	..	5	All expenses pa id by the department.
300 00	"	13	18	31	16	19	6	1	3	2	..	..	..	..	..	..	..	..	
*300 00	"	28	31	59	42	24	7	14	9	5	..	..	..	..	..	..	..	..	
300 00	"	15	9	24	12	12	7	5	..	..	..	..	..	..	..	..	..	..	
300 00	"	5	10	15	8	13	2	..	..	..	..	..	..	..	..	..	..	..	
300 00	"	7	5	12	6	6	3	3	..	..	..	..	..	..	..	..	..	..	

*Paid $3.00 on average up to 42 pupils.

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TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
MANITOBA—*Concluded.*				
Wabigoon	Wabigoon	Savanne	Henry Johns	Episcopal
Wabuskang	Wabuskang	"	John Evans	"
Washakada Home (Elkhorn) Industrial	At Elkhorn	Manitoba	A. E. Wilson	"
Water Hen River	*Water Hen River	Manitowapaw	J. H. Adam	Roman Catholic
" Boarding		"	J. H. Adam	"
Whitefish Bay	Whitefish Bay	Rat Portage	Etienne Charron	"

*One school—day and boarding.

STATEMENT No. 3—*Continued.*

which Returns have been received) for the Year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total Number on Roll.	Average Daily Attendance.	Classes of Study.						Industries.							General Remarks.
						Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	Farmer.	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Tinsmith.	Printer.	
$ cts.																			
300 00	Appropriation	16	14	30	9	25	3	2	..	..	..	..	..	..	..	..	..	..	
300 00	"	8	13	21	6	18	2	1	..	..	..	..	..	..	..	..	..	..	
9,900 00	"	71	28	99	90	28	16	26	16	10	..	..	13	12	5	4	2	7	Girls taught general housework, and the boys, trades, as shown.
300 00	"	10	6	16	13	12	3	1	..	..	..	..	..	..	..	..	..	..	
600 00	"	1	9	10	10	5	4	1	..	..	..	..	..	..	..	..	..	..	
300 00	"	9	7	16	7	8	8	..	..	..	..	..	..	..	..	..	..	..	

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
NORTH-WEST TERRITORIES.				
Alexander	Alexander	Edmonton	Solomon Madore	Roman Catholic
Alexis (Joseph's)	Alexis	"	Leon Peltier	"
Armadale Mission (Mistawasis)	Mistawasis	Carlton	Laura McIntosh	Presbyterian
Battleford Industrial	At Battleford	Battleford	Rev. M. Matheson	Episcopal
Battle River (Sampsons)	Sampson's	Hobbema	Harna Shaw	Methodist
Bear's Hill (Louis Bull)	Louis Bull	"	J. A. Youmans	"
" (Ermineskin)	Ermineskin	"	S. S. Sœur de Marie	Roman Catholic
Beardy and Okamasis	Beardy& Okamasis	Duck Lake	F. Ladret	"
Beaver River	Chippewayan	Onion Lake	T. W. Harris	"
Birtle Boarding	At Birtle	Birtle	Neil Gilmour	Presbyterian
Blackfoot (Old Sun)	Blackfoot	Blackfoot	Rev. J. W. Tims	Episcopal
" Boarding (St. John's)	"	"	"	"
Blackfoot (White Eagle) Boarding	"	"	"	"
Blackfoot (Eagle Ribs)	"	"	J. S. Mahood	"
" (Crowfoot)	"	"	Vital Robbe	Roman Catholic
" (Many Shot Ats)	"	"	Spencer Collins	Episcopal
Blood (Bull Shields)	Blood	Blood	Henry G. Hewson	Roman Catholic
" (Bull's Horns)	"	"	A. F. H. Mills	Episcopal
" (Running Wolf)	"	"	Albertina St. George	Roman Catholic
" (Red Crow)	"	"	C. A. McAnally	Episcopal
" (Heavy Shields)	"	"	Sister St. Germain	Roman Catholic
" (St. Paul) Boarding	"	"	F. Swainson	Episcopal
" (") Day	"	"	F. Swainson	"
Blue Quills	Blue Quills	Saddle Lake	F. Petitdemange	Roman Catholic
Crowstand Boarding	Near Côté's	Swan River	C. W. Whyte	Presbyterian
Day Star	Day Star	Touchwood	M. Williams	Episcopal
Duck Lake Boarding		Duck Lake	Rev. M. J. P. Paquette	Roman Catholic
Eagle Hills (Red Pheasant)	Ne'r Red Pheasant's	Battleford	W. Wilson	Episcopal
Emmanuel College	At Prince Albert	Duck Lake	Ven. J. A. Mackay	"
File Hills Boarding	Okanees	File Hills	Alex. Skene	Presbyterian
Good Fish Lake	James Seenums	Saddle Lake	Frederick Zurhorst	Methodist
Gordon (Day)	Côté's	Touchwood	Rev. C. F. Lallemand	Episcopal
" Boarding	"	"	Rev. Owen Owens	"
Jack Fish Creek Moosomins)	Moosomins	Battleford	Lizzie J. Donovan	"
John Smith	John Smith	Duck Lake	A. C. McGregor	"
James Smith	Jim Smith	"	J. F. D. Parker	"
Keys	Key's	Swan River	E. Harold Dee	"
Keeseekouse	Keeseekouse	"	G. Vendome	Roman Catholic
Lac la Biche Boarding	Lac la Biche	Saddle Lake	Rev. H. Grandin	"
Lac la Rouge	Lac la Rouge	Duck Lake	Samuel Abraham	Episcopal
Little Pines	Little Pines	Battleford	C. A. Lindsay	"
Meadow Lake	Meadow Lake	Carlton	A. M. Venne	Roman Catholic
Montreal Lake	Montreal Lake	"	Thos. Badger	Episcopal
Morley No. 1	Morley	Sarcee	John W. Niddrie	Methodist
" No. 2	"	"	E. R. Steinhaur	"
Muscowequan's Boarding	Muscowequan	Touchwood	F. W. Dennehey	Roman Catholic
" (Day)	"	"	"	"
Muskeg Lake (Petequakey)	Petequakey's	Carlton	A. M. Venne	"
McDougall Orphanage	Stony	Sarcee	J. W. Butler	Methodist

STATEMENT No. 3—*Continued.*

which Returns have been received) for the Year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total number on Roll.	Average daily attendance.	Classes of Study.						Industries.										Remarks.
						Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	Farmer.	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Tinsmith.	Printer.	Painter.	Teacher.	Baker.	Engineer.	
$ cts.																						
300 00	Appropriation	13	10	23	11	15	5	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	9	9	18	8	7	8	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	4	13	17	8	11	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
*.....	" ..	73	47	120	100	36	23	21	18	10	3	27	17	9	..	12	..	4	2	..	..	..	Girls taught housework, and the boys trades, as shown.
300 00	" ..	8	19	27	12	20	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	4	6	10	5	7	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	23	23	46	17	31	12	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	2	8	10	2	9	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Closed 30th Sept., 1894.
300 00	" ..	11	12	23	16	10	8	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
1,440 00	" ..	17	18	35	18	18	2	4	8	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	9	6	15	4	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
2,520 00	" ..	27	14	41	32	21	12	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
1,080 00	" ..	18	..	18	9	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	15	9	24	11	23	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	15	10	25	18	17	6	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	17	19	36	16	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Closed 31st Dec. 94
300 00	" ..	10	15	25	5	23	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	" 31st Mar. 95
300 00	" ..	12	6	18	9	17	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	11	9	20	11	13	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	10	7	17	7	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	11	7	18	10	14	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
2,880 00	" ..	20	23	43	41	24	16	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	One school. Tuition grant $3 per quarter per pupil.
.....	" ..	10	4	14	12	12	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	9	5	14	11	8	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
2,160 00	" ..	20	15	35	20	24	6	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	5	5	10	6	1	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
2,160 00	" ..	9	21	30	22	22	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	14	5	19	11	13	2	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
2,600 00	" ..	20	10	30	25	10	5	5	7	1	..	5	..	..	..	..	..	..	..	6	..	..	Farming taught. Boys trained for school teachers.
720 00	" ..	10	4	14	9	3	2	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	21	15	36	14	16	9	6	5	..	..	..	..	..	..	..	..	..	..	..	..	..	
.....	" ..	2	3	5	2	2	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	One school. Tuition grant for day pupils $3 per quarter.
1,296 00	" ..	12	9	21	13	3	6	6	1	4	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	5	7	12	8	4	3	3	2	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	9	17	26	10	12	6	7	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	10	9	19	7	9	8	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	5	9	14	6	7	2	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
.....	" ..	4	6	10	3	6	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
1,296 00	" ..	20	13	33	25	4	5	8	7	2	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	7	12	19	10	12	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	11	9	20	13	13	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	9	9	18	6	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	8	8	16	14	10	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	23	26	49	11	47	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	17	11	28	6	23	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
1,440 00	" ..	10	10	20	15	4	10	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	One school. Tuition grant $3 per pupil per quarter
	" ..	2	4	6	4	1	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	5	5	10	7	8	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Teacher transferred to Meadow Lake.
2,448 00	. ..	16	21	37	22	10	11	13	1	..	..	8	..	..	..	..	..	..	..	..	..	..	

*All expenses paid by the department.

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Reserve on which situated.	Agency.	Teacher.	Denomination.
NORTH-WEST TERRITORIES—*Continued.*				
Oak River	Oak River	Birtle	C. H. Hartland	Episcopal
Onion Lake	Sekascootch	Onion Lake	J. R. Matheson	"
" Boarding	"	"	"	"
"	"	"	Sister St. Patrick	Roman Catholic
" Boarding	"	"	Rev. J. A. M. Therien	"
Piegan Boarding	Crow Eagle	Piegan	Rev. J. Hinchcliffe	Episcopal
" Day	"	"	Rev. Donat Foisy	Roman Catholic
Poundmaker's	Poundmaker's	Battleford	Patrick Burke	"
Qu'Appelle Industrial	At Qu'Appelle		Rev. J. Huggonard	"
Regina Industrial	Near Regina		Rev. A. J. McLeod	Presbyterian
Red Deer Industrial	At Red Deer		Rev. John Nelson	Methodist
Riding Mountain (Okanase)	Okanase	Birtle	Mary S. McIntosh	Presbyterian
Round Lake Boarding	At Round Lake	Crooked Lake	Rev. H. McKay	"
Saddle Lake	Saddle Lake	Saddle Lake	A. E. McKitrick	Methodist
Sandy Lake	Attakakoop	Carlton	Louis Ahenakew	Episcopal
Sarcee Boarding	Sarcee	Sarcee	Rev. H. W. Gibbon Stocken	"
Shoal River	Keys	Swan River	E. H. Bassing	"
Sioux Mission (Swan River)	Near Prince Albert	Duck Lake	Annie Cameron	Presbyterian
Standing Buffalo	Standing Buffalo	Muscowpetung	Frank Jordens	Roman Catholic
Stony Plain	Enoch	Edmonton	Ada Latulippe	"
Sturgeon Lake	Twatt's	Carlton	J. F. D. Parker	Episcopal
Sweet Grass	Sweet Grass	Battleford	W. J. Hope	"
"	"	"	John Pritchard	Roman Catholic
St. Albert Boarding	At St. Albert	Edmonton	Sister Brassard	"
St. Joseph's Industrial	At Dunbow		Rev. A. Næsens	"
Thunder Child	Thunder Child	Battleford	C. F. Desmarais	Episcopal
"	"	"	J. V. Gingras	Roman Catholic
Turtle Mountain	Turtle Mountain	Birtle	Alex. F. Mackenzie	Christian Endeavor Society
White Cap Sioux	Moose Woods	Near Saskatoon	Mrs. W. R. Tucker	Methodist
White Fish Lake	James Seenum's	Saddle Lake	Minnie F. Featherston	"
White Whale Lake	Paul's	Edmonton	Wm. G. Blewett	"

STATEMENT No. 3—*Continued.*

which Returns have been received) for the year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund paid.	Number on Roll—Boys.	Number on Roll—Girls.	Total Number on Roll.	Average Daily Attendance.	Classes of Study.						Industries.										General Remarks.
						Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.	Farmer.	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Tinsmith.	Printer.	Painter.	Teacher.	Baker.	Engineer.	
$ cts.																						
300 00	Appropriation	11	9	20	7	14	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
.....	" ..	4	2	6	5	3	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	One school. Tuition grant $3 per quarter per pupil.
1,152 00	" ..	4	2	6	5	2	2	0	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
....	" ..	13	11	24	11	17	4	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	
1,440 00	" ..	8	14	22	20	10	5	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..	"
1,080 00	" ..	20	11	31	22	26	5	..	..	..	..	..	2	..	3	..	..	..	..	..	2	..	Boys taught gardening, shoemaking and baking; girls general housework.
300 00	" ..	9	11	20	11	17	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	11	9	20	10	11	2	5	..	3	..	..	..	..	..	..	..	..	..	..	..	..	
23,000 00	" ..	104	124	228	191	43	41	78	43	18	1	7	10	9	..	8	..	..	..	..	7	..	Boys taught trades as shown, and girls knitting, sewing, cooking and general housework.
19,500 00	" ..	85	52	137	110	56	26	26	19	7	1	19	16	14	..	3	..	..	6	..	..	..	
7,000 00	" ..	37	24	61	34	12	10	16	8	4	..	14	6	..	..	..	..	..	..	..	..	..	
300 00	" ..	8	11	19	11	12	3	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
1,440 00	" ..	11	10	21	14	8	10	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	13	8	21	13	17	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	11	7	18	14	14	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
1,080 00	" ..	17	10	27	18	15	5	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	19	12	31	19	17	10	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	15	4	19	10	10	5	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	7	6	13	6	10	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	8	6	14	5	8	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	4	3	7	2	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Teacher transferred from Jim Smith's Reserve.
....	" ..	5	5	10	7	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	5	6	11	7	3	2	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	
4,680 00	" ..	33	37	70	63	12	10	7	16	14	7	6	..	..	..	..	..	..	..	1	1	..	Girls taught knitting, sewing, cooking and housework, and boys trades as shown.
16,800 00	" ..	90	32	122	105	62	27	18	9	5	..	10	5	10	..	..	..	..	..	..	..	1	Boys taught trades as shown, and girls knitting, sewing, cooking and general housework.
300 00	" ..	9	9	18	12	12	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	4	5	9	6	1	2	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	
.....	....	4	2	6	2	2	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	Appropriation	8	7	15	11	2	3	6	3	1	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	8	10	18	8	8	2	4	2	2	..	..	..	..	..	..	..	..	..	..	..	..	
300 00	" ..	19	16	35	14	33	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

TABULAR

SHOWING the Condition of the various Indian Schools in the Dominion (from

School.	Agency.	Teacher.	Denomination.
OUTSIDE OF TREATY LIMITS.			
Albany	.....	.....	Episcopal.....
Christ Church	Peace River District.....	Frank Giles.....	" .....
Fort Churchill	Hudson Bay District.....	J. Lofthouse.....	" .....
Fort Chippewayan	Athabasca and Mackenzie River District	H. E. A. Thompson.	" .....
Fort Resolution	" " " ..	Grace Lawrence	" .....
Fort George	East Main Coast, Hudson Bay District.	Wm. E. Walton.....	" .....
Great Whale River	At Fort George.....	"	" .....
Isle à la Crosse	.....	Sister Langlier.....	Roman Catholic..
Lesser Slave Lake Boarding	Peace River District.....	Rev. Geo. Holmes..	Episcopal.....
Lesser Slave Lake	" "	Rev. A. Desmarais..	Roman Catholic..
Moose Fort	James Bay District.....	.....	Episcopal.....
Rupert's House	.....	.....	" .....
Nativity Mission	Athabasca and Mackenzie River District	Sister Martin.....	Roman Catholic..

STATEMENT No. 3—*Continued.*

which Returns have been received) for the Year ended 30th June, 1895.

Yearly Salary or Grant Provided.	From what Fund paid.	Number on Roll.		Total number on Roll.	Average daily attendance.	Classes of Study.						General Remarks.	
		Boys.	Girls.			Standard 1.	Standard 2.	Standard 3.	Standard 4.	Standard 5.	Standard 6.		
$ cts.													
200 00	Special grant											No returns have been received.	
200 00	"											"	"
200 00	"	11	7	18	14	18							
300 00	Appropriation	6	9	15	12	4	3	6	2				
200 00	Special grant	3	8	11	6	5	1	2	1	2			
200 00	"											"	"
200 00	"											"	"
300 00	Appropriation	6	9	15	14	4	4	3	4				
1,000 00	"	12	10	22	16	12	6	2	1				
300 00	"	11	6	17	15	10	4	3					
200 00	"											"	"
200 00	"											"	"
200 00	"	6	8	14	14	4		5	2		3		

TABULAR STATEMENT No. 3—*Continued.*

SHOWING the Condition of the various Indian Schools.

SUMMARY OF STATEMENT No. 3.

Provinces.	Number of Schools.	Number of pupils on roll.
Ontario	81	2,425
Quebec	20	619
Nova Scotia	8	146
New Brunswick	5	102
Prince Edward Island	1	31
British Columbia	29	1,029
Manitoba	54	1,612
North-west Territories	80	2,273
Outside Treaty Limits	13	112
Total	291	8,349

HAYTER REED,
Deputy Supt. Gen. of Indian Affairs.

MARTIN BENSON,
In charge of School Branch,

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, 30th June, 1895.

Department of Indian Affairs

PROGRAMME OF STUDIES

INDIAN SCHOOLS

TABULAR

PROGRAMME OF STU

THE Programme of studies herein prescribed shall be followed by the teacher as far shall be made only with the

SUBJECT.	STANDARD 1.	STANDARD 2.	STANDARD 3.
English.....	Word recognition and sentence making. Simple sounds of letters of alphabet. Copying words.	Sounds continued. Sentence making continued. Orthography, oral and written. Dictation of words learnt and of simple sentences.	Sounds completed. Simple homonyms explained. Sentence making continued. Orthography, oral and written. Sentences dictated. Compose sentences about objects and actions.
General knowledge.	Facts concerning things in school. Develop what is already known. Days of week, month.	The seasons. Measures of length and weight in common use. Colours. Commence animal and vegetable kingdoms, their parts and uses, cultivation, growth, &c. Things in and about the school and their parts.	Animal and vegetable kingdoms continued. Money. The useful metals.
Writing.....	Elementary strokes and words on slates. Large round hand.	Words, &c., on slates. Large round hand.	Slates and copy book No. 1. Medium round hand.
Arithmetic	Numbers 1 to 10: their combinations and separations, oral and written. The igns +, −, ×, ÷. Count to 10 by ones, twos, threes, &c. Use and meaning one-half, one-third, one-tenth. Making and showing one-half, one-fourth, one-eighth, one-third, one-sixth, one-ninth, one-fifth, one-tenth, one-seventh (no figures). Simple problems. Oral.	Numbers 10 to 25: their combinations and separations (oral and written.) Count to 25 by ones, twos, threes, &c. Use and meaning of one-half, one-third, one-fourth, &c., to one-twenty-fifth (no figures). Relation of halves, fourths, eighths, thirds, sixths, twelfths, thirds, ninths (no figures). Simple problems, introducing gallons in peck, pecks in bushel, months in year, inches in foot, pound, current coins up to 25c. Addition in columns, no total to exceed 25.	Numbers 25 to 100: their combinations and separations, oral and written. Count to 100 by ones, twos, threes, &c., to tens. Use and meaning of one-twenty-sixth, one-twenty-seventh, &c., to one-one-hundredth (no figures). Addition, subtraction, division and partition of fractions of Standard 2. Roman numerals I to C. Simple problems, introducing seconds in minutes, minutes in hours, hours in day, pounds in bushel, sheets in quire, quires in ream.
Geography.....	.....	....	Development of geographical notions by reference to geographical features of neighbourhood. Elementary lessons on direction, distance, extent.

STATEMENT No. 3—*Continued.*

DIES FOR INDIAN SCHOOLS.

as the circumstances of his school permit. Any modifications deemed necessary concurrence of the department.

STANDARD 4.	STANDARD 5.	STANDARD 6.
Sounds reviewed. Sentence enlargement. Orthography, oral and written. Letter writing. Simple composition, oral and written, reviewing work on general knowledge course.	Enlargement and correction of sentences continued. Orthography, oral and written. Letter writing continued. Easy, oral and written, composition, reviewing general knowledge course.	Analysis of simple sentences. Parts of speech. Orthography, oral and written. Letter writing continued. Oral and written composition, reviewing general knowledge course.
Animal, vegetable and mineral kingdoms continued. Uses of railways and ships. Explain manufacture of articles in common use. The races of man.	Same enlarged. Laws regarding fires, game, &c., of daily use.	Social relations. Seats of Government in Canada. System of representation and justice. Commerce and exchange of products.
Copy books Nos. 2 and 3. Medium round hand.	Copy books Nos. 4 and 5. Small round hand.	Copy books Nos. 6 and 7. Small round hand.
Numeration and notation to 10,000. Simple rules to 10,000. Addition, subtraction, division and partition of fractions already known (figures). Introduce terms numerator, denominator, &c. Roman notation to 2,000. Graded problems, introducing remaining reduction tables. Daily practice in simple rules to secure accuracy and rapidity.	Notation and numeration completed. Formal reduction. Vulgar fractions to thirtieths. Denominate fractions. Daily practice to secure accuracy and rapidity in simple rules. Graded problems. Reading and writing decimals to thousandths inclusive.	Factors, measures and multiples. Vulgar fractions completed. Easy application of decimals to tenthousandths. Easy application of square and cubic measures. Daily practice to secure accuracy and rapidity in simple rules. Easy application of percentage. Graded problems.
(*a*) Review of work of Standard 3. Lessons to lead to simple conception of the earth as a great ball, with surface of land and water, surrounded by the air, lighted by the sun, and with two motions. (*b*) Lessons on natural features, first from observation, afterwards by aid of moulding board, pictures and blackboard illustrations. (*c*) Preparations for and introduction of maps. (Review of lessons in position, distance, direction, with representations drawn to scale.) Study of map of vicinity drawn on blackboard. Maps of natural features drawn from moulded forms. Practice in reading conventional map symbols on outline maps.	Simple study of the important countries in each continent. Province in which school is situated and Canada to be studied first. The position of the country in the continent; its natural features, climate, productions, its people, their occupations, manners, customs, noted localities, cities, &c. Moulding boards and map-drawing to be aids in the study.	(*a*) The earth as a globe. Simple illustrations and statements with reference to form, size, meridians and parallels, with their use; motions and their effects, as day and night, seasons, zones, with their characteristics, as winds and ocean currents, climate as affecting the life of man. (*b*) Physical features and conditions of North America, South America and Europe, studied and compared. Position on the globe; position relative to other grand divisions, size, form, surface, drainage, animal and vegetable life, resources, &c. Natural advantages of the cities.

TABULAR

PROGRAMME OF STU

THE Programme of studies herein prescribed shall be followed by the

SUBJECT.	STANDARD 1.	STANDARD 2.	STANDARD 3.
Geography.....	.....	.....	Development of geographical notions by reference to geographical features of neighbourhood. Elementary lessons on direction, distance, extent.
Ethics.....	The practice of cleanliness, obedience, respect, order, neatness.	Right and wrong. Truth. Continuance of proper appearance and behaviour.	Independence. Self-respect. Develop the reasons for proper appearance and behaviour.
Reading.....	First Primer.....	Second Primer.....	Second Reader.....
Recitations	To begin in Standard 2, are to be in line with what is taught in English, and developed into		
History.....			Stories of Indians of Canada and their civilization.
Vocal Music....	Simple Songs and Hymns. The subjects of the former to be interesting and patriotic.		
Calisthenics....	Exercises, frequently accompanied by singing, to afford variation during work and to		
Religious Instruction.	Scripture Reading. The Ten Commandments. Lord's Prayer. Life of Christ, &c., &c.		

NOTE.—ENGLISH.—Every effort must be made to induce pupils to speak English, and to teach them to
READING.—Pupils must be taught to read loudly and distinctly. Every word and sentence must
sentence, in their own words, in English, and also in their own language if the
GENERAL.—Instruction is to be direct, the voice and blackboard being the principal agents. The
N.B.—It will be considered a proof of the incompetency of a teacher, if pupils are found to read in
mark applies to all teaching, viz. :—Everything must be thoroughly understood, before a pupil

STATEMENT No. 3—*Concluded.*

DIES FOR INDIAN SCHOOLS.

teacher as far as the circumstances of his school permit, &c.—*Continued.*

STANDARD 4.	STANDARD 5.	STANDARD 6.
(*d*) General study from globe and maps. The hemisphere, continent, oceans and large islands, their relative positions and size. The continents: position, climate, form, outline, surroundings, principal mountains, rivers, lakes; the most important countries, productions, people, interesting facts and associations.	Simple study of the important countries in each continent, &c., &c.	(*c*) Observation to accompany the study of geography—apparent movements of the sun, moon and stars, and varying time of their rising and setting; difference in heat of the sun's rays at different hours of the day; change in the direction of the sun's rays coming through a school-room window at the same hour during the year; varying length of noon-day shadows; changes of the weather, wind and seasons.
Industry. Honesty. Thrift.....	Citizenship of Indians. Patriotism. Industry. Thrift. Self-maintenance. Charity. Pauperism.	Indian and white life. Patriotism. Evils of Indian isolation. Enfranchisement. Labour the law of life. Relations of the sexes as to labour. Home and public duties.
Third Reader.....	Fourth Reader.....	Fifth Reader.
pieces of verse and prose which contain the highest moral and patriotic maxims and thoughts.		
History of province in which school is situated.	Canadian History (commenced)..	Canadian history (continued.)
The tunes bright and cheerful.		
improve physique.		

understand it; unless they do the whole work of the teacher is likely to be wasted.
be fully explained to them, and from time to time they should be required to state the sense of a lesson or teacher understands it.
unnecessary use of text books to be avoided.
"parrot fashion" only, *i.e.*, without in the least understanding what they read. And the following re- is advanced to further studies.

Earnings of Indians, 1894-95.

Agency.	Cattle, Horses and Sheep.	Senega root, Lime, Charcoal, Berries, Grain, and Roots.	Furs, Fish and Game.	Wood and Hay.	Manufactures.	Labour and Freighting.	Miscellaneous.	Total.	How expended.
Treaty No. 4.	$ cts.	$ cts.	$ cts.	$ cts.	cts.	$ cts.	$ cts.	$ cts.	
Swan River	1,452 08	66 50	8,000 00	.....	3 50	589 90	.....	10,111 98	Young cattle, provisions, clothing and farm implements.
Birtle	1,256 81	1,546 94	3,931 50	140 75	1,808 00	4,616 25	.....	13,300 25	" "
Moose Mountain	208 96	148 45	526 54	497 80	466 50	639 10	.....	2,487 35	" "
Crooked Lake	2,183 98	2,385 51	275 00	606 75	801 40	72 50	.....	6,325 14	" "
Assiniboine	70 70	71 50	24 00	346 25	110 00	167 87	.....	790 32	" " accounts.
File Hills	1,366 54	418 45	16 00	191 00	127 00	159 73	.....	2,278 72	" "
Muscowpetungs	2,373 50	959 55	92 00	5,338 95	107 30	1,849 00	313 50	11,033 80	" "
Touchwood Hills	1,587 58	.....	7,260 00	64 00	7 50	1,214 32	75 00	10,208 40	" "
	10,500 15	5,596 90	20,125 04	7,185 50	3,431 20	9,308 67	388 50	56,535 96	
Treaty No. 6.									
Duck Lake	1,119 56	630 10	2,273 00	25 60	.....	693 92	308 45	5,050 63	"
Carlton	619 88	9 90	2,378 00	.....	61 00	928 25	351 00	4,348 03	"
Battleford	439 92	217 00	161 25	1,259 60	60 00	161 75	29 95	2,329 47	" "
Onion Lake	24 00	213 03	6,000 00	104 50	.....	1,254 99	584 08	8,180 60	" "
Saddle Lake	.....	17 45	5,388 20	.....	.....	617 79	.....	6,023 44	" "
Edmonton	383 79	361 50	8,811 00	46 00	14 00	976 00	6 00	10,598 29	" "
Hobbema	1,548 00	540 40	3,520 00	.....	.....	578 00	.....	5,986 00	" "
	4,135 15	1,989 38	28,531 45	1,435 70	135 00	5,210 70	1,279 48	42,516 46	
Treaty No. 7.									
Sarcee	51 00	446 60	24 25	860 03	82 75	320 75	.....	1,785 38	" "
Blackfoot	311 57	.....	.....	609 00	.....	2,466 50	404 68	3,791 75	" "
Blood	.....	1,098 50	105 00	1,489 00	.....	4,227 24	9 20	6,928 94	" "
Piegan	2,000 82	.....	.....	60 00	.....	2,405 02	51 50	4,517 34	" "
Stony	265 63	.....	3,720 00	90 50	.....	603 25	4 00	4,683 38	" "
	2,629 02	1,545 10	3,849 25	3,108 53	82 75	10,022 76	469 38	21,706 79	
Grand Total	17,264 32	9,131 38	52,505 74	11,729 73	3,648 95	24,542 13	2,137 36	120,759 21	

TABULAR STATEMENT No. 4

CENSUS RETURN OF RESIDENT AND NOMADIC INDIANS; DENOMINATIONS TO WHICH THEY BELONG, WITH APPROXIMATE NUMBER BELONGING TO EACH DENOMINATION, IN THE DOMINION OF CANADA, BY PROVINCES.

TABULAR STATEMENT No. 4.

CENSUS RETURN of Resident and Nomadic Indians; Denominations to which they belong, with approximate number belonging to each Denomination, in the Dominion of Canada, by Provinces.

PROVINCE OF ONTARIO.

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Algonquins, Golden Lake	90	.....	90	.....	
" Renfrew North	*286	.....	.....	.....	Stragglers.
Chippewas of the Thames	443	443	.....	.....	
" Walpole Island	645	600	25	20	
" Sarnia	453	453	.....	.....	
" Georgina and Snake Island	118	118	.....	.....	
" Rama	229	217	12	.....	
" Saugeen	378	334	44	.....	
" Nawash	392	264	128	.....	
" Beausoleil	397	254	142	1	49 non-treaty Indians.
Iroquois and Algonquins of Gibson, Muskoka District	136	136	.....	.....	
Moravians of the Thames	304	304	.....	.....	
Mississaguas of Mud Lake	162	162	.....	.....	
" Rice Lake	79	79	.....	.....	
" Scugog	37	37	.....	.....	
" Alnwick	229	229	.....	.....	
" New Credit	242	242	.....	.....	
Mohawks of the Bay of Quinté	1,153	1,153	.....	.....	
Munsees of the Thames	122	122	.....	.....	
Oneidas of the Thames	783	783	.....	.....	
Pottawattamies of Walpole Island	183	175	.....	8	
" Aux Sables	22	22	.....	.....	
Ojibbewas and Ottawas of Manitoulin and Cockburn Islands at—					
Cockburn Island	44	.....	44	.....	
Sheshegwaning	160	.....	160	.....	
West Bay	263	.....	263	.....	
Sucker Creek	109	109	.....	.....	
Sheguiandah	152	152	.....	.....	
Sucker Lake	25	.....	25	.....	
South Bay	74	.....	74	.....	
Wikwemikong (unceded)	940	.....	940	.....	
Wikwemikongsing (unceded)	196	.....	196	.....	
Obedgewong	22	.....	.....	22	
Ojibbewas of Lake Superior at—					
Fort William	377	.....	334	43	
Red Rock or Helen Island	205	32	173	.....	
Pays Plat	57	.....	57	.....	
Lake Nepigon	529	.....	203	326	
Pic River	252	.....	252	.....	
Long Lake	336	.....	336	.....	
Michipicoton and Big Heads	334	124	210	.....	
Ojibbewas of Lake Huron at—					
Thessalon River	178	.....	176		
Maganettawan	189	.....	181	8	
Spanish River	619	62	492	65	
White Fish Lake	137	25	111	1	
Mississagua River	161	19	142	.....	
Onewaiegonce	47	7	40	.....	
Serpent River	116	.....	106	10	
French River	84	79	1	4	
Tahgaiwinini	151	6	145	.....	
White Fish River	89	63	26	.....	
Parry Island	80	34	25	21	
Carried forward	12,809	6,839	5,153	53	

*Religion unknown.

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF ONTARIO—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Brought forward	12,809	6,839	5,153	531	
Ojibbewas of Lake Huron—*Con.*					
Shawanaga	115	81	34		
Henvey's Inlet	192	49	143		
Lake Nipissing	183		183		
Temogamingue	79		79		
Dokis	74		74		
Garden River	452	126	326		
Batchewana Bay	364	20	344		
Six Nations on the Grand River	3,629	2,794		835	
Wyandottes of Anderdon	*10				Stragglers.
Total	17,907	9,909	6,336	1,366	

PROVINCE OF QUEBEC.

Abenakis of St. Francis	325	69	256		The decrease in population of the Abenakis of St. Francis is owing to the fact that the census has been more accurately taken than heretofore by the newly appointed agent.
" Becancour	55		55		
Algonquins of—					
Desert	486		486		
Temiscamingue	139		139		
Pontiac, unorganized	*230				
County of Ottawa	*1,063				Stragglers.
Champlain, St. Maurice Territory	*261				
St. Maurice	*125				"
Amalecites of Viger	114		114		"
Hurons of Lorette	409	5	404		109 absentees returned during the year.
Iroquois of Caughnawaga	1,897	21	1,876		
" St. Regis	12,31	145	1,086		
" and Algonquins of the Lake of Two Mountains	431	271	160		
Micmacs of Maria	91		91		
" Restigouche	476		476		
Montagnais of Betsiamits	393		393		
" Escoumains	54		54		
" Godbout	40		40		
" Grand Romaine	304		304		
" Lake St. John	470		470		76 Abenakis.
" Mingan	158		158		
Naskapees of the Lower St. Lawrence	2,860				
Seven Islands	353		353		
Total	11,965	511	6,915		

PROVINCE OF NOVA SCOTIA.

Micmacs of—					
Annapolis—G. Wells, Agent	82		82		
Digby—F. McDormand, Agent	180		180		
Carried forward	262		262		

*Religion unknown.

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF NOVA SCOTIA—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Brought forward	262		262		
Micmacs of—*Continued.*					
King's—C. E. Beckwith, Agent	77		77		
Queen's—Rev. Thos. J. Butler, Agent	91		91		
Lunenburg— "	73		73		
Halifax—Rev. D. O'Sullivan, Agent	119		119		
Hants—James Gass, Agent	199		199		
Colchester—D. H. Muir, M.D., Agent	100		100		
Cumberland—F. A. Rand, M.D., Agent	101		101		
Pictou—Rev. R. McDonald, Agent	206		206		
Antigonish and Guysboro'—W. C. Chisholm, Agent	167		167		
Richmond—Rev. J. C. Chisholm, Agent	135		135		
Inverness—Rev. D. McIsaac, Agent	146		146		Bands at Whycocomah and Malagawatch.
Victoria—John E. Cameron, Agent	97		97		
Cape Breton—Rev. A. Cameron, D.D., Agent	243		243		
Yarmouth	91		91		
Shelburne—J. J. E. deMolitor, Agent	57		57		
Total	2,164		2,164		

PROVINCE OF NEW BRUNSWICK.

Micmacs of Kent County at—					
Big Cove	272		272		
Indian Island	34		34		
Buctouche	25		25		
Micmacs of Northumberland County at—					
Eel Ground	136		136		
Burnt Church	203		203		
Red Bank	56		56		
Micmacs of Gloucester County, at Bathurst	29		29		
" Restigouche County, at Eel River	52		52		
" Westmoreland County at—					
Fort Folly	47		47		
Moncton and vicinity	31		31		
Shediac	16		16		
Micmacs of King's County at Hampton	55		55		
Amalecites of York County at—					
St. Mary's	131		131		
Kingsclear	107		107		
Amalecites of Carleton County, at Woodstock	92		92		
" Charlotte County	35		35		
" St. John County	11		11		
" King's County, at Apohaqui	32		32		
" Sunbury County, at Oromocto	36		36		
" Queen's County, at Upper and Lower Gagetown	31		31		
" Victoria County, at Tobique	200		200		
" Madawaska County, at Edmundston	37		37		
Total	1,668		1,668		

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF PRINCE EDWARD ISLAND.

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Micmacs—John O. Arsenault, Superintendent	287	.....	287	.....	

PROVINCE OF BRITISH COLUMBIA.

WEST COAST AGENCY.					
Ahous-aht	257	.....	40	217	
Clao-qu-aht	253	.....	46	207	
Chaic-cles-aht	129	.....	30	99	
Ehatt-is-aht	126	.....	28	98	
Ewl-hwil-aht	175	.....	20	155	
Hes-qui-aht	200	.....	141	59	
Honchuk-lis-aht	42	.....	4	38	
Kel-sem-aht	87	.....	20	67	
Ky-uk-aht	442	.....	69	373	
Match itl-aht	67	.....	.....	67	
Mooacht-aht	216	.....	30	186	
Nitin-aht	191	.....	.....	191	
Nooch-aht-aht	120	.....	18	102	
Oi-aht	202	.....	53	149	
Opitches-aht	66	.....	15	51	
Pacheen-aht	81	.....	.....	81	
To-qu-aht	23	.....	.....	23	
Tsesh-aht	157	.....	38	119	
Total	2,834	.....	552	2,282	
FRASER RIVER AGENCY.					
Aitchelich	10	10	.....	.....	The decrease in numbers, the agent states, is owing chiefly to the fact that he has been able to obtain a more accurate census on most of the reserves.
Burrard Inlet, No. 3 Reserve	34	.....	34	.....	
Cheam	128	.....	128	.....	
Chehalis	127	16	111	.....	
Coquitlam	41	.....	41	.....	
Douglas	111	.....	111	.....	
Ewa-woos	99	.....	99	.....	
False Creek	64	.....	64	.....	
Homalko	103	.....	103	.....	
Hope	119	.....	119	.....	
Hastings Saw-mill	103	103	.....	.....	
Katsie	73	.....	73	.....	
Klahoose	110	.....	110	.....	
Kapilano	60	.....	60	.....	
Kwaw-kwan-piet	25	.....	25	.....	
Langley	77	.....	77	.....	
Mission, Burrard Inlet	253	.....	253	.....	
Musqueam	133	9	124	.....	
Matsqui	52	.....	52	.....	
New Westminster	71	.....	71	.....	
Nicomen	19	.....	19	.....	
Ohamil	85	42	43	.....	
Pemberton-Meadows	197	.....	197	.....	
Popkum	22	22	.....	.....	
Semi-ah-moo	45	.....	45	.....	
Sechelt	228	.....	228	.....	
Sumass	132	46	86	.....	
Carried forward	2,521	248	2,273	.....	

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF BRITISH COLUMBIA—*Continued.*

Indians.		Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
FRASER RIVER AGENCY—*Continued.*						
Brought forward		2,521	248	2,273	.....	
Scowlitz		51	.....	51	.....	
Squiahla		17	4	13	.....	
Skweahm		30	.....	30	.....	
Sliammon		290	.....	290	.....	
Slumach		69	.....	69	.....	
Squatits		76	26	50	.....	
Skw-amish, Howe Sound		228	94	134	.....	
Skwah		90	.....	90	.....	
Skookum Chuck		120	.....	120	.....	
Skulteen		122	.....	122	.....	
Skulkayer		26	26	.....	.....	
Skawah-looks		66	.....	66	.....	
Seymour-Creek		40	40	.....	.....	
Skway		52	.....	52	.....	
Texas Lake		45	.....	45	.....	
Tche-wassan		62	.....	62	.....	
Tsoo-wah lie		51	45	6	.....	
Tyeach-ten		46	33	13	.....	
Wharnock		47	.....	47	.....	
Yale		87	33	54	.....	
Yu-kwea-kwi-oose		41	.....	41	.....	
Total		4,177	549	3,628	.....	
BABINE AND UPPER SKEENA RIVER AGENCY.						
Kit-wang-agh	Kit-ksun Division, Upper Skeena River.	148	50	.....	98	
Kit-wan cool		72	.....	.....	72	
Kit-se-quak-la (Old and new village)		83	13	.....	70	
Git-an-max (Hazelton)		242	60	.....	182	
Kits-piouse		225	40	.....	185	
Kits-ge-goos		273	.....	.....	273	
Gol-doe		44	.....	.....	44	
Moricetown (Lach al sap)	Ho-quel-get Division.	149	.....	149	.....	Babine Group.
Ho-quel-get		153	.....	153	.....	
Fort Babine		163	.....	163	.....	
Old Fort Babine		153	.....	153	.....	
Yu-cutoce (Portage)		22	.....	22	.....	Carrier Group.
Thatce		40	.....	40	.....	
Grand Rapids		15	.....	15	.....	
Tsis-tlam-lee (Lake Trembleur)		15	.....	15	.....	
Pintee		35	.....	35	.....	
Stuart's Lake Village		159	.....	159	.....	
Fraser's Lake Village		57	.....	57	.....	
Stony Creek		102	.....	102	.....	
Fort George		122	.....	122	.....	
Tsis-tlatho		68	.....	68	.....	
McLeod's Lake	Nomadic.	95	.....	95	.....	Sikanees.
Fort Grahame		99	.....	99	.....	
Connolly Lake		119	.....	119	.....	
Na-anee bands [(2) north of Connolly Lake] some nomadic		147	.....	147	.....	
Total		2,800	163	1,713	924	

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF BRITISH COLUMBIA—*Continued.*

Indians.		Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
WILLIAM'S LAKE AGENCY.						
Alexandra		51	.....	51	.....	
Alkali Lake		149	.....	149	.....	
Aneham		197	.....	197	.....	
Anderson Lake No. 1		65	.....	65	.....	
Bridge River		92	.....	92	.....	
Canoe Creek		152	.....	152	.....	
Cayoosh No. 1		22	22	.....	.....	
" 2		29	.....	29	.....	
Clinton		37	.....	37	.....	
Dog Creek		11	.....	11	.....	
Fountain		194	.....	194	.....	
High Bar		50	.....	50	.....	
Kenim Lake		72	.....	72	.....	
Lillooet No. 1		89	89	.....	.....	
" (Chinook) No. 2		10	.....	10	.....	
Pavilion		61	.....	61	.....	
Quesnelle		68	.....	68	.....	
Seaton Lake No. 1		66	.....	66	.....	
" 2		3	.....	3	.....	
" 5		32	.....	32	.....	
" 6		49	.....	49	.....	
Soda Creek		77	.....	77	.....	
Stones		98	.....	98	.....	
Taasey		53	.....	53	.....	
William's Lake		151	.....	151	.....	
Total		1,878	111	1,767	.....	
NORTH-WEST COAST AGENCY.						
Massett	Haida Nation.	364	364	.....	.....	
Skidegate		171	171	.....	.....	
Clew		58	58	.....	.....	
Kincolith	Nishgar Nation.	218	218	.....	.....	
Kitlax		76	.....	.....	76	
Lach-als-ap		82	82	.....	.....	
Kitangataa		51	.....	.....	51	
Kitwintshilth		87	.....	.....	87	
Aiyaush		104	104	.....	.....	
Kitlachdamax		170	170	.....	.....	
Fort Simpson	Tsimsean Nation.	716	716	.....	.....	
Metlakahtla		163	163	.....	.....	
Kitkatla		213	213	.....	.....	
Kitkaata		86	86	.....	.....	
Kitsumkalem		64	64	.....	.....	
Kitsalas		91	91	.....	.....	
Kitimatt	Oweekayno Nation.	298	298	.....	.....	
Kitlope		95	95	.....	.....	
China Hat		99	99	.....	.....	
Bella Bella		283	283	.....	.....	
Oweekayno		152	152	.....	.....	
Quassella		44	.....	.....	44	
Kinisquit	Tallion Nation.	89	.....	.....	89	
Bella Coola		208	38	.....	170	
Tallion		43	.....	.....	43	
Total		4,025	3,465	.....	560	

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF BRITISH COLUMBIA—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
KOOTENAY AGENCY.					
Columbia Lake, St. Mary's, Tobacco Plains (Upper Kootenay.)	68	.....	68	.....	
	209	.....	209	.....	
	90	.....	90	.....	
Flat Bow (Lower Kootenay)	162	.....	162	.....	
Kinbaskets (Shuswap tribe)	52	.....	52	.....	
Total	581	.....	581	.....	
COWICHAN AGENCY.					
Sooke	25	.....	.....	.....	The decrease in numbers is owing chiefly to the prevalence of la grippe last spring which carried off a number of old people. 26 Indians belonging to this agency were drowned when the sealing schooner "Earle" was lost with all on board.
Cheerno	45	.....	.....	.....	
Esquimalt	24	.....	.....	.....	
Songhees	114	.....	.....	.....	
Malakut	15	.....	.....	.....	
Tse-kum	22	.....	.....	.....	
Pan-que-chin	61	.....	.....	.....	
Tsart-ilp	49	.....	.....	.....	
Tsaw-out	89	.....	.....	.....	
Kil-pan-lus	9	.....	.....	.....	
Comeakin	71	.....	.....	.....	
Clem-clem-a-lats	141	.....	.....	.....	
Khe-nip-sim	66	.....	.....	.....	
Kok-si-lah	29	.....	.....	.....	
Quamichan	270	.....	.....	.....	
Somenos	110	.....	.....	.....	
Hellelt	31	.....	.....	.....	
Sic-ca-meen	39	.....	.....	.....	
Ly-ach-sun	69	.....	.....	.....	
Kul-leets	79	.....	.....	.....	
Ll-malche	19	.....	.....	.....	
Penel-a-kut	131	The majority of these Indians have been baptized into the Roman Catholic Church. Many attend R. C. Missions, Wesleyan and English Church, as they may feel inclined; but a very large number attend no church whatever, and are, in fact, pagans.			
Tsussie	49				
Nanaimo	167				
Sno-no-wus	14				
Qual-i-cum	15				
Galiano Island Fishing Station	25				
Punt-ledge, Sail-up-sun and Comox	67				
Mayne Island	29				
Haitch Point	4	.....	.....	.....	
Discovery Islands	32	.....	.....	.....	
Cowichan Lake	9	.....	.....	.....	
Newcastle Townsite	26	.....	.....	.....	
Total	1,945	.....	.....	.....	
KAMLOOPS AGENCY.					
Spuzzum, Kekalus, Skuwha, Chataway (Spuzzum Group.)	142	89	52	1	
	25	14	11	.....	
	11	.....	11	.....	
	11	.....	11	.....	
Tqwayaum, Kapatsitsan, Mpaktam, Skuzzy (Boston Bar Group.)	134	58	73	3	
	39	24	15	.....	
	11	11	.....	.....	
	69	.....	69	.....	
Carried forward	442	196	242	4	

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF BRITISH COLUMBIA—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
KAMLOOPS AGENCY—*Continued.*					
Brought forward	442	196	242	4	
Chomok (Bothroyd Group.)	11	11			
Kamus (Bothroyd Group.)	59	56		3	
Speyam (Bothroyd Group.)	29	25		4	
Snuk (Bothroyd Group.)	29	29			
Nkatsam (Bothroyd Group.)	111	111			
Hlukhlukatan (Kanaka Bar)	75	75			
Siska (Siska Group)	31	31			
Halaha (Siska Group)	8	8			
Skappa (Skappa)	23	23			
Tlkumcheen (Lytton Group)	160	123	37		
Kittsawat (Lytton Group)	16	16			
Nkya (Lytton Group)	48	48			
Spapium (Lytton Group)	25	25			
Nhumeen (Lytton Group)	22	21		1	
Nquakin (Lytton Group)	49	46		3	
Stryune (Lytton Group)	51	51			
Nkaih (Lytton Group)	4	4			
Yeut (Lytton Group)	15	15			
Snahain (Lytton Group)	16	16			
Skaap (Lytton Group)	14	14			
Nesikeep (Lytton Group)	37	37			
Nikaomin (Nicomen Group.)	24	24			
Shhahanih (Nicomen Group.)	92	92			
Nkumckeen (Cook's Ferry Group.)	84	80		4	
Piminos and Pakeist (Cook's Ferry Group.)	46	46			
Spaptsin (Cook's Ferry Group.)	25	25			
Nepa (Oregon Jack Group.)	20	20			
Paska (Oregon Jack Group.)	15	15			
Stlahl (Ashcroft)	57	57			
Naaik (Nicola Group)	115	61	52	2	
Quinshaatin (Nicola Group)	23		23		
Quiskanaht (Nicola Group)	25		25		
Yoht (Nicola Group)	17	17			
Nyiskat (Nicola Group)	17		17		
Tluhtans (Bonaparte)	133		133		Shuswap tribe.
Skichistan (Deadman's Creek)	70		70		Shuswap tribe.
Kamloops (Kamloops)	231		231		Shuswap tribe.
Chukchuqualk (North Thompson)	125		125		Shuswap tribe.
Halaut (South Thompson)	128		128		Shuswap tribe.
Haltkum (Adams Lake)	145		145		Shuswap tribe.
Kualt (Little Shuswap Lake)	71		71		Shuswap tribe.
Spallumcheen (Spallumcheen)	63		63		Shuswap tribe.
Total	2,801	1,418	1,362	21	
OKANAGAN AGENCY.					
Nkamaplix (Okanagan Lake)	159		159		
Penticton (Penticton)	135		135		
Nkamip (Osoyoos)	28		28		
Keremeus (Similkameen)	41		41		
Shennosquankin (Similkameen)	43		43		
Spahamin (Douglas Lake)	152		152		
Total	558		558		

TABULAR STATEMENT No. 4—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF BRITISH COLUMBIA—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
KWAWKEWLTH AGENCY.					
Ah-wha-mish	105	105			
Kos-ki-mu	127			127	
Kea-wit-sis	74			74	
Kwat-seno	32			32	
Kwaw-shela	57			57	
Kwaw-kewlth	33	33			
Kwi-kah	56	56			
Ma-til-pi	63	63			
Mama-lil-li-kulla	149	149			
Na-kwak-ta	107			107	
Nim-kish	145	145			
Nu-witti	74			74	
Ta-nak-tenk	136			136	
Tsa-wan-ti-e-neuh	146	146			
Wan-lit-sum } Liew-kwil-tah.	69			69	
Wi-wai-ai-kum } Liew-kwil-tah.	108		108		
Wi-wai-ai-kai } Liew-kwil-tah.	116	116			
Total	1,597	813	108	676	

PROVINCE OF MANITOBA.

CHIPPEWAS AND CREES OF TREATY NO. 1 AT—					
Rosseau River, including Rapids	250		72	178	
Long Plain	127	2	125		
Swan Lake and Indian Gardens at Hamilton's Crossing	122			122	
St. Peter's	1,098	939	125	34	
Broken Head	224	113	52	59	
Fort Alexander	469	221	237	11	
Sandy Bay (Agent Martineau)	258	65	167	26	
Total, Treaty No. 1	2,548	1,340	778	430	
CHIPPEWAS AND CREES OF TREATY NO. 2 AT—					
Lake Manitoba	107	4	62	41	
Ebb and Flow Lake	81	19	64	7	
Fairford	170	170			
Little Saskatchewan	104	99		5	
Lake St. Martin	102	79		23	
Crane River	49	7		42	
Water Hen River	115		115		
Total, Treaty No. 2	728	369	241	118	

Bands not visited, about 2,500. These are mainly some detached bands of Stickeen, Chilcats and some small Tinnie Tribes, on the head waters of the Stickeen, Chilcat, Yukon, Laird and Dease Rivers.

RECAPITULATION, B.C.

Population, 25,696; Protestant, 6,519; Roman Catholics, 10,269; Pagans, 4,463.
There are 4,445 of which the department has no returns as to religion.

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

PROVINCE OF MANITOBA—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
CHIPPEWAS AND SAULTEAUX OF TREATY NO. 3 AT—					
Hungry Hall, No. 1	37			37	
" No. 2	23			23	
Long Sault, No. 1	46	1		45	
" No. 2	59	1		58	
Manitou Rapids, No. 1	87			87	
" No. 2	34			34	
Little Forks	63	5		58	
Coutcheeching	128	3	99	26	
Stangecoming	43			43	
Niacatchewenin	56			56	
Nickickonesemenecaning	67			67	
Rivière la Seine	148			148	
Lac la Croix	96		8	88	
Lac des Mille Lacs	81	4		77	
Kawaiagamot (Sturgeon Lake)	26			26	
Eagle Lake	62			62	
Wabigoon	91			91	
Lac Seul	314	302	2	10	
Wabushkang	75	23	7	45	
Grassy Narrows	97	23	41	33	
Islington	161	149		12	
Rat Portage	90			90	
Shoal Lake, No. 39	74			74	
" 40	62			62	
North-west Angle, No. 37	120			120	
" " 33	54			54	
" " 34	23			23	
Buffalo Bay	55			55	
Big Island	135			135	
Assabasca	195			195	
White Fish Bay	57		4	53	
The Dalles	60	31	15	14	
Frenchman's Head	209	128	77	4	
Total, Treaty No. 3	2,928	670	253	2,005	
CHIPPEWAS, SAULTEAUX AND CREES OF TREATY NO. 5 AT—					
Black River	61	60	1		
Hollow Water	104	7	19	78	
Loon Straits	15	15			
Blood Vein	97		4	93	
Fisher River	345	345			
Jack Head	83	20	15	48	
Berens River	228	185	43		
Poplar River	150	34		116	
Norway House	555	555			
Cross Lake	236	235	1		
Grand Rapids	171	114		57	
Pekangekum	71			71	
Grand Rapids (Crees and Saulteaux)	111	110	1		
Chemawawin (Crees)	135	124		11	
Moose Lake (Crees and Saulteaux)	119	101		18	
The Pas " "	389	365	6	18	
Pas Mountain (Crees)	173	107		66	
Cumberland "	142	138	4		
Birch River "					Reserve unoccupied.
Total, Treaty No. 5	3,185	2,515	94	576	

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

NORTH-WEST TERRITORIES.

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Treaty No. 4.					
BIRTLE AGENCY.					
Kee-see-koo-wenin's	129	111	15	3	
Way-way-see-cappo	170	29	30	106	Religious belief of 5 absentees not given.
Valley River	68	19	5	42	" 2 "
Gambler's	43	.....	21	2	" 20 "
Rolling River	121	.....	16	100	" 5 "
Bird Tail (Sioux.)	81	45	.....	36	
Oak River (Sioux.)	281	167	.....	114	
Oak Lake (Sioux.)	40	.....	.....	40	
Turtle Mountain (Sioux.)	24	.....	5	19	
Total	957	371	92	462	
SWAN RIVER AGENCY (FORT PELLY).					
Coté	278	156	15	107	
Key	228	127	8	93	
Kisickouse	145	27	50	68	
Total	651	310	73	268	
MOOSE MOUNTAIN AGENCY.					
Pheasant Rump	56	.....	13	43	
Striped Blanket	56	1	1	54	
White Bear	125	4	7	114	
Total	237	5	21	211	
CROOKED LAKE AGENCY.					
Ochapowace	122	10	15	97	
Kah-ke-wis-ta-haw	131	24	10	97	
Cowesess	149	17	111	21	
Sakimay	204	8	8	188	
Total	606	59	144	403	
ASSINIBOINE AGENCY.					
Carry-the-Kettle	238	13	14	211	
FILE HILLS AGENCY.					
Little Black Bear	73	.....	27	46	
Star Blanket	51	.....	2	49	
Okanees	74	.....	11	63	
Pee-pee-kesis	82	.....	35	47	
Total	280	.....	75	205	

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

NORTH-WEST TERRITORIES—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Treaty No. 4—Continued.					
TOUCHWOOD HILLS AGENCY.					
Day Star	82	78	4	.....	
Poor Man	98	89	9	.....	
George Gordon	160	125	18	17	
Muscowequan	142	.....	76	66	
Yellow Quill	354	.....	8	346	
Total	836	292	115	429	
MUSCOWPETUNG AGENCY.					
Pasquah	181	16	81	84	
Muscowpetung	119	10	7	102	
Piapot	217	11	22	184	
Standing Buffalo (Sioux)	161	.....	97	64	
Total	678	37	207	434	
PINE CREEK (Agent Martineau)	58	.....	57	1	
*Total in Treaty No. 4	4,541	1,087	798	2,624	
Treaty No. 6.					
DUCK LAKE AGENCY.					
One Arrow	107	17	26	64	
Okemasis	21	1	18	2	
Beardy	126	2	22	102	
John Smith	139	125	14	.....	
James Smith	133	94	.....	39	
Bands 100 and 100 A	101	74	.....	27	
Total	627	313	80	234	
CARLTON AGENCY.					
William Twatt (Sturgeon Lake	148	5	.....	143	
Petequakey (Muskeg Lake)	69	1	68	.....	
Mistawasis (Snake Lake)	146	111	35	.....	
Ahtahkakoop (Sandy Lake)	212	189	19	4	
Kapahawekeenum (Meadow Lake)	71	.....	29	42	
Kenemotayoo (Stony and Whitefish Lakes)	101	71	.....	30	
Pelican Lake Indians	43	.....	.....	43	
Wah-spa-ton Sioux, non-treaty (Round Plain)	37	.....	.....	37	
James Roberts (Lac la Ronge)	411	411	.....	.....	
William Charles (Montreal Lake)	114	114	.....	.....	
Total	1,352	902	151	299	

*Religious belief of 32 absentees in Birtle Agency not given.

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

NORTH-WEST TERRITORIES—*Continued.*

Indians.	Census Return	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Treaty No. 6—Continued.					
BATTLEFORD AGENCY.					
Mosquito, Bear's Head, Lean Man } Stony	93	93			
Red Pheasant	137	118	13	6	
Sweet Grass	123	46	75	2	
Poundmaker	125	8	117	.....	
Little Pine and Lucky Man	116	62	42	12	
Moosomin	105	26	64	15	
Thunderchild	162	82	73	7	
Total	861	435	384	42	
HOBBEMA AGENCY.					
Ermineskin	173	6	165	2	
Sampson	285	184	81	*19	
Louis Bull	56	53	3	.....	
Sharphead (Cheepoostequan)	2	2	.....	.....	
Total	516	245	249	21	
ONION LAKE AGENCY.					
See-kas-kootch	173				
Sweet Grass (attached)	18				
Weenisticooseahwasis	105				
Ooneepowhayo	68	88	557	28	
Puskeeahkeewein	29				
Keeheewin	111				
Kinoosayo (Chippewayan)	169				
Total	673	88	557	28	
EDMONTON AGENCY.					
Enoch	148	21	126	1	
Alexander	219	19	200	.....	
Joseph	145	.....	145	.....	
Paul and Sharphead	137	128	9	.....	
Michel	79	.....	79	.....	
Orphans of St. Albert	8	.....	8	.....	
Total	736	168	567	1	
SADDLE LAKE AGENCY.					
Saddle Lake	91	73	18	.....	
Wahsatanow	23	18	5	.....	
Blue Quill	87	6	81	.....	
James Seenum	312	280	32	.....	
Lac La Biche	19	.....	19	.....	
Chippewayan	69	.....	69	.....	
Beaver Lake	100	.....	100	.....	
Total	701	377	324	.....	
Total in Treaty No. 6	5,466	2,528	2,312	625	*Religion of 1 unknown.

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

NORTH-WEST TERRITORIES—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Treaty No. 7.					
Sarcee Agency	236	3	5	228	
*Stony reserve (P. L. Grasse, Farmer)	576	576	.....	.....	
BLACKFOOT AGENCY.					
†Running Rabit and Old Sun	1,267	140	1,127	.....	
BLOOD AGENCY.					
‡Bloods	1,427	.....	.....	1,427	
PIEGAN AGENCY.					
Piegan	781	1	.....	780	
Total in Treaty No. 7	4,287	720	1,132	2,435	
UPPER M'KENZIE DISTRICT.					
Rampart House	.....	400	No return.	.....	
EASTERN ARTHABASCA DISTRICT.					
Green Lake	.....	No return...	14	32	
Ile à la Crosse	.....	" ..	500	.....	
Portage la Loche	.....	" ..	220	.....	
Water Hen Lake	.....	" ..	4	111	
Total	.....	.....	738	143	
LOWER M'KENZIE DISTRICT.					
Peel River	.....	430	255	.....	
Fort Good Hope	.....	.....	570	.....	
Fort Norman	.....	80	244	.....	
Fort Wrigley	.....	90	190	.....	
Fort Simpson	.....	100	99	.....	
Total	.....	700	1,358	.....	
GREAT SLAVE LAKE DISTRICT.					
Providence	.....	100	482	.....	
Fort Rae	.....	.....	800	.....	
Fort Resolution	.....	30	503	.....	
Total	.....	130	1,785	.....	
RIVIÈRE AUX LIARDS DISTRICT.					
Fort Liards	.....	.....	205	.....	
Fort Nelson	.....	.....	172	.....	
Total	.....	.....	377	.....	

*Population in 1894 given by Farmer Grasse at 612, should have been 573.

†Although 140 are claimed as being Protestant and 1,127 as being Roman Catholic, all are virtually Pagans.

‡The large decrease of 67 is explained by the agent as follows:—deaths over births, 3; adults died, 39; difference between those who left for the United States and those who returned, 25; total, 67.

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Continued.*

NORTH-WEST TERRITORIES—*Continued.*

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
ATHABASCA DISTRICT.					
Fort Smith	.....	.....	280	.....	
Fort Chippewayan	.....	.....	641	.....	
Fond du Lac	.....	.....	260	.....	
Fort McMurray	.....	.....	150	.....	
Total	.....	.....	1,331	.....	
PEACE RIVER DISTRICT.					
Fort Dunvegan	.....	2	98	No ret'n	
Smoky River	.....	3	135	"	
Grand Prairie	.....	.....	72	3	
Fort St. John	.....	.....	125	25	
Fort Vermillion	.....	52	145	No ret'n	
Hay River	.....	1	122	1	
Red River	.....	20	64	25	
Total	.....	78	761	54	
LESSER SLAVE LAKE DISTRICT.					
Lesser Slave Lake	.....	42	558	7	
Sturgeon Lake	.....	.....	152	4	
Whitefish Lake	.....	41	42	37	
Trout and Manitou Lake	.....	.....	38	36	
Wabashaw, Kilrow and L'Original	.....	33	174	54	
Total	.....	116	964	138	
YUKON DISTRICT.					
Forty Mile Creek	.....	400	No return.	2,000	
Selkirk or Pelly River	.....	200	"		
Total	.....	600	.....	2,000	
NELSON AND CHURCHILL RIVERS DISTRICT.					
Pelican Narrows	.....	No return.	211	No ret'n	
Nelson River	.....	"	115	"	
Churchill	.....	"	No return.	"	
Lac Caribou	.....	"	525	"	
Esquimaux	.....	"	1	"	
Total	.....	.....	852	.....	

PROVINCE OF MANITOBA.

RECAPITULATION.

Treaty No. 1	2,548	1,340	778	430	
" 2	728	369	241	118	
" 3	2,928	670	253	2,005	
" 5	3,185	2,515	94	576	
Grand Total	9,389	4,894	1,366	3,129	

Eastern Rupert's Land	4,016*
Labrador, Canadian Interior	1,000*
Arctic Coast, Esquimaux	1,000*

*Religion unknown.

TABULAR STATEMENT No. 4.—Census Return of Resident and Nomadic Indians; Denominations to which they belong, &c.—*Concluded.*

NORTH-WEST TERRITORIES.

RECAPITULATION.

Indians.	Census Return.	Acknowledged and claimed as being Protestant.	Acknowledged and claimed as being Roman Catholic.	Pagan.	Remarks.
Treaty No. 4	4,541	1,087	798	2,624	Religion of 32 absentees not given.
" 6	5,466	2,528	2,312	625	Religion of 1
" 7	4,287	720	1,132	2,435	unknown.
Non-Treaty Indians	364	.....	.....	.....	Rel'g'n unknown
Grand Total	14,658	4,335	4,242	5,684	

RECAPITULATION.

Ontario	17,907	9,909	6,336	1,366	Religion of 296 unknown.
Quebec	11,965	511	6,915	.....	Religion of 4,539
Nova Scotia	2,164	.....	2,164	.....	unknown.
New Brunswick	1,668	.....	1,668	.....	
Prince Edward Island	287	.....	287	.....	
British Columbia	25,696	6,519	10,269	4,463	Religion of 4,445
Manitoba	9,389	4,894	1,366	3,129	unknown.
North-west Territories	14,658	4,335	4,242	5,684	Religion of 397 unknown.
Upper McKenzie District	400	400	.....	.....	The census of these Indians is not perfectly accurate.
Eastern Athabaska "	881	.....	738	143	
Lower McKenzie "	2,058	700	1,358	.....	
Great Slave Lake "	1,915	130	1,785	.....	
Riviere Aux Liards "	377	.....	377	.....	
Athabasca "	1,331	.....	1,331	.....	
Peace River "	893	78	761	54	
Lesser Slave Lake "	1,218	116	964	138	
Yukon "	2,600	600	.....	2,000	
Nelson and Churchill River District	852	.....	852	.....	
Eastern Rupert's Land	4,016	.....	.....	.....	Rel'g'n unknown
Labrador, Canadian Interior	1,000	.....	.....	.....	" "
Arctic Coast, Esquimaux	1,000	.....	.....	.....	" "
Total	102,275	28,192	41,413	16,977	

HAYTER REED,
Deputy Superintendent General of Indian Affairs.

JOHN MCGIRR, *Clerk of Statistics.*

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, 30th June, 1895.

NOTE—The religious belief of the various bands throughout the Dominion can only be given approximately, and more especially in the case of those bands residing in the more uncivilized parts of the country.

WHEREABOUTS of Sioux and Straggling Indians in N.W.T. (not reported in Agents' Tabular Statements).

Name of Band.	Located.	Tribe.	Number.
(None)	Birtle District	Sioux.	75
White Cap	Moose Woods	"	54
(None)	Moosejaw and Regina	"	115
(None)	Stragglers in vicinity of Swift Current, Maple Creek and Medicine Hat	Cree and Saulteaux.	120
	Total		364

Department of Indian Affairs.

RETURN showing implements, tools, vehicles, harness, &c., the private property of Indians, acquired by earnings from labour, sale of live stock, hay, wood, &c.

Agency.	Mowers.	Horse rakes.	Wagons.	Carts.	Buckboards.	Sleighs.	Cutters.	Harness.	Binders.	Reapers.	Rollers.	Fanning mills.	Seeders. (Drill)	Ploughs.	Forks.	Shovels.
Swan River	12	8	23	5	....	7	....	19	....	....	....	....	....	....	....	....
Birtle	38	25	44	29	....	33	....	40	14	....	....	3	....	20	....	....
Moose Mountain	6	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Crooked Lake	23	18	35	20	....	26	....	35	8	....	7	2	....	4	....	....
Assiniboine	2	1	4	3	....	8	....	....	....	....	....	....	....	....	....	....
File Hills	9	5	5	....	....	12	....	18	....	....	....	....	....	....	....	....
Muscowpetungs	20	15	57	7	18	46	1	54	2	1	....	....	....	3	2	....
Touchwood Hills	13	10	14	....	9	9	....	21	1	....	....	....	....	....	9	....
Duck Lake	4	6	15	24	15	26	....	61	1	....	....	....	....	....	....	5
Carlton	4	4	14	....	13	....	....	....	....	....	....	....	....	....	....	....
Battleford	22	20	73	....	6	87	....	88	....	....	....	....	....	....	....	....
Onion Lake	7	4	8	4	4	....	....	1	....	1	....	....	....	....	....	....
Saddle Lake	15	15	19	35	7	39	....	60	....	....	....	....	1	....	....	....
Edmonton	5	2	10	11	9	18	....	23	....	1	....	....	....	....	....	....
Hobbema	3	3	9	12	6	21	....	56	....	....	....	....	....	....	....	....
Sarcees	3	2	....	....	....	10	....	1	1	....	....	....	....	....	6	....
Stony Reserve	....	....	4	5	2	1	....	16	....	....	....	....	....	....	....	....
Blackfoot	8	8	13	....	3	....	....	6	....	....	....	....	....	....	33	....
Bloods	13	13	22	....	4	20	....	72	....	....	....	....	....	2	....	....
Piegans	8	8	17	....	....	....	....	6	....	....	....	....	....	....	....	....
Total	215	171	387	155	96	363	1	577	27	3	7	5	1	29	50	5

FARMING AGENCIES AND INDIAN RESERVATIONS

Approximate Return of Grain and

BIRTLE

Number.	Name of Band.	Location.	Name of Farmer in Charge.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Grain and Wheat.	Grain and Oats.
								Acres.	Acres.
57	Bird Tail Sioux...	Bird Tail Creek....	None.	.....	279⅜	347	400	272	59
58	Oak River Sioux..	Oak River.	R. W. Scott..	.....	736¼	520	4500	416	83
59	Oak Lake Sioux...	Pipestone Creek....	None..... ..	.....	87¾	70	40	[illegible]	11
60	Turtle Mountain Sioux.....	Turtle Mountain....	"	.....	7	18	20	.....	9¾
61	Kee-See-Koo-Wenin's.....	Riding "	"	.....	43⅞	62	1000	12	32
62	Way-way-see-cappo's.....	Lizard Point (Bird Tail Creek)...	"	.....	12⅝	20	300	5	.....
62½	Valley River.....	Valley River.....	"	.....	⅝	4	5	.....	.....
63	Gambler's	Silver Creek.....	"	.....	1¼	8	...	3	4
67	Rolling River.....	Rolling River.....	"	.....	6⅞	5	100	2½	.. ..
			Total.....		1173 9/16	1054	6365	766½	198¾

MOOSE

Number.	Name of Band.	Location.	Name of Farmer in Charge.	Total Acres broken during year.	Acres under crop last year,	Acres under crop this year.	Acres fenced.	Grain and Wheat.	Grain and Oats.
								Acres.	Acres.
68	Pheasant Rump...	Moose Mountain..	C. Lawford...	.....	89	89½	600	71	7
69	Striped Blanket ..	" " ...	" ...	.....	86	130	210	99	16
70	White Bear.....	" " ...	Indian Agent acts as farmer as well...	.....	27½	46	128	30	1
			Total.....	.....	202½	265½	938	200	24

Department of Indian Affairs.

FOR THE YEAR ENDING 31st OCTOBER, 1895.

Roots Sown and Harvested.

AGENCY.

Roots Sown						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Corn.	Peas.	Garden.		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Corn.	*Garden stuff.	Hay cut.
Acres.	Acres.	Acres.	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
....	5 3/8	.....	9 3/8	.....	1 5/16	.....	6444	1444	.....	428	.....	370	160	222
1	12 1/4	.....	6	.....	2 3/8	.....	11674	1836	34	1105	.....	233	73	617
.....	1 3/4	.....	1 3/8	....	1/2	.....	1020	170	.....	140	.....	56	22	38
....	4 3/4	.....	3 7/16	.....	1/16	.....	.....	150	.....	348	.....	53	.....	67
....	7 3/4	....	.....	.....	1/16	.....	300	750	.....	620	.....	.....	26	375
.....	14 3/4	.....	....	.....	7/8	....	.....	.....	.....	1095	.....	.....	.....	790
.....	3 1/4	.....	.....	.....	1/8	.....	.....	.....	.....	260	.....	.....	60	148
....	1	.....	.....	.....	1/8	.....	45	80	....	80	.....	...	2	79
....	2 7/8	.....	.....	.....	1/16	.....	40	.....	.....	230	.....	.....	25	148
1	54 1/8	.....	20 3/16	.....	8 1/16	.....	19523	4430	34	4306	.....	712	368	2484

MOUNTAIN.

Roots Sown.						Grain and Roots Harvested.							
Barley.	Potatoes.	Turnips.	Corn.	Pease.	Garden.		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Corn and Garden stuff.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
4	3	3	....	.....	1 1/2	.....	326	55	.....	108	276	27	233
8	3 1/2	2 1/2	.....	.....	1	.....	505	60	.....	168	314	43	158
.....	7 1/2	3 1/2	2	.....	2	.....	449	.....	.....	433	416	69 1/2	374
12	14	9	2	.....	4 1/2	.....	1280	115	.....	709	1006	139 1/2	765

* Garden stuff consists of onions and carrots.

Note.—One-half acre of turnips sown after 30th June. One acre of oats omitted from June return, Band No. 70.

FARMING AGENCIES AND

Approximate Return of Grain and

BIRTLE

Reserve No.	Name of Band.	Location.	Name of Farmer in in Charge.	Approximate No. of Indians on Reserve.	Men employed including Instructor.	Horses & Cattle. Held under Treaty or on Loan. Horses.	Oxen.	Private Property of Indians. Horses	Oxen.
57	Bird Tail Sioux...	Bird Tail Creek ...	None	81	.....	.....	16	31	.....
58	Oak River Sioux..	Oak River	R. W. Scott...	281	1	2	46	54	.....
59	Oak Lake Sioux ..	Pipestone Creek....	None	40	.....	.....	10	10	...
60	Turtle Mountain Sioux.....	Turtle Mountain...	"	24	.....	.....	3	7	.. ...
61	Kee-See-Koo-Wenin's.....	Riding "	"	136	.....	.....	.....	48	.....
62	Way-way-see-cappo's.	Lizard Point (Bird Tail Creek)	"	160	.....	.....	18	30	1
62½	Valley River	Valley River.....	"	68	.....	.....	2	10	5
63	Gambler's.....	Silver Creek	"	85	.....	.....	4	24	1
67	Rolling River.....	Rolling River	"	117	.. ..	.....	3	25	.....
			Total	992	1	2	102	239	7

MOOSE

Reserve No.	Name of Band.	Location.	Name of Farmer in Charge.	Approximate No. of Indians on Reserve.	Men employed including Instructor.	Horses & Cattle. Held under Treaty or on Loan. Horses.	Oxen.	Private Property of Indians. Horses.	Oxen.
68	Pheasant Rump...	Moose Mountain...	C. Langford..	43	1	4	21	15	.. ...
69	Striped Blanket...	" " ...	" ..	34	.....	.....	13	11	.....
70	White Bear.....	" " ...	Indian Agent acts as farmer as well...	113	1	.....	24	39	.....
			Total	190	2	4	58	65	...

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

AGENCY.

New Buildings Erected.								Land Summer Fallowed.	Land Fall Ploughed.	Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.	Sheep Pens.	Hen Houses.	—			
								Acres	Acres	
1	1	.....	.....	.....	.....	....	.....	80	100	
2	6	.....	.....	.....	....	.. ..	.....	138	200	
.....	.	. ...	.....	.....	....	.....	.....	15	20	
.....	. ..	. ...	....	.....	.....	.....	.....	.....	.. ...	
1	3	....	.....	.....	.....	.....	.....	10	10	
1	2	.....	....	.....	.....	.. ...	.....	.....	.....	
.....	.....	.....	.. ..	.. ..	.....	.....	.....	.	.....	
.....	.....	. .	.....	.....	.....	. ....	.....	20	.....	
3	2	.....	.....	.....	.....	..	... .	.....	.....	J. A. Markle, Indian Agent
8	14	. .. .	.....	.....	.....	... .	.....	263	330	

MOUNTAIN.

New Buildings Erected.								Land Summer Fallowed.	Land Fall Ploughed.	Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.	Sheep Pens.	Hen Houses.	—			
								Acres.	Acres.	
1	2	.....	.....	.....	.....	. ..	.....	.....	.....	
3	3	.....	.....	.....	.....	.....	.....	.....	....	
3	5	. ....	.....	.....	.....	....	.....	.....	.....	
7	10	.....	.....	....	.....	.....	.....	.....	.....	J. J. Campbell, Indian Agent

FARMING AGENCIES AND

Approximate Return of Grain and

FILE

Reserve No.	Name of Instructor.	Location.	Grain and: Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Wheat.	Oats.
							Acres.	Acres.
84		File Hills	25	42	52	52	43	.....
83		"	.....	4	14½	14½	11½	.....
82		"	40	56	75	75	53	16
81		"	10	40	23	23	20	....
		Total	75	142	164½	164½	127½	16

MUSCOWPETUNG

Reserve No.	Name of Band.	Location.	Name of Farmer in Charge.	Grain and: Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Wheat.	Oats.
								Acres	Acres
9	Home Farm	Qu'Appelle Valley	J. H. Gooderham	.....	10⅛	7¼	.....	.....	3
75	Piapot	" "	" "	.....	118	107	20	90	3
4*b*	Home Farm	" "	John Nicol	.....	17½	12	.....	.....	5
80	Muscowpetung	" "	"	.....	59	51	.....	42	.....
4*a*	Home Farm	Qu'Appelle Lakes.	S. Hockley	.....	14	13	.....	.....	6
79	Pasquah	" "	"	.....	115½	87	.....	70	7
78	Standing Buffalo	" "	"	.....	71¾	55½	.....	42	2
			Total	.....	406 1/12	332¾	20	244	26

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

HILLS.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
3	.....	.....	.....	.....	6	.....	.....	60	190	117	.....	.....	.....	487
.....	.....	.....	.....	.....	3	.....	.....	.....	66	.....	.....	.....	.....	155
.....	.....	.....	.....	.....	6	198	620	.....	320	190	.....	.....	.....	442
.....	.....	.....	.....	.....	3	469	.....	.....	184	.....	.....	.....	.....	310
3	.....	.....	.....	.....	18	667	620	60	760	307	.....	.....	.....	1394

AGENCY.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Corn.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Gardens	Corn.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
4	¼	.....	....	.....	.....	.....	100	95	55	.....	.....	.....	.....	20
4	5	4	1	.....	....	1137	104	92	471	593	41	.....	.....	900
6	½	.....	.....	.....	½	.....	125	100	35	.....	6	.....	.....	20
...	5	3	.....	.....	1	640	.....	.....	380	160	8	.....	.....	515
6	½	¼	.....	.....	½	.....	210	200	30	40	.....	20	.....	14
3	4½	1	.....	.....	1½	1364	444	250	268	67	.....	70	.....	340
.....	5½	2	...	3	1	515	50	.....	755	170	.....	50	37	200
23	21¼	10¼	1	3	4¼	3656	1033	737	1994	1030	55	140	37	2009

Note.—Hay stacked for fodder; barley, good; yield of oats, good sample, splendid. Total number of tons of hay put up for whole agency, 1,394. Approximate estimate of grain not threshed.

FARMING AGENCIES AND

Approximate Return of Grain and

FILE

Reserve No.	Name of Instructor.	n.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
					Given under Treaty or on Loan.		Private Property of Indians.	
					Horses.	Oxen.	Horses.	Oxen.
84	.....	File Hills.....	74	...	2	17	37	.....
83	....	"	49	.....	... ...	6	9	....
82	....	"	70	.....	6	14	26	... .
81	.....	"	76	.....	... .	15	15	.....
		Total.....	269	.....	8	52	87	.....

MUSCOWPETUNG

Reserve No.	Name of Band.	Location.	Name of Instructor in Charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
						Held under Treaty or on Loan.		Private Property of Indians.	
						Horses.	Oxen.	Horses.	Oxen.
9	Home Farm.....	Qu'Appelle Valley	J.H. Gooderham	.....	1	1	.....	.....	.....
75	Piapot	" "	" "	160	.....	.....	49	206	.....
4b	Home Farm.....	" "	John Nicol.....	.....	1	4	.....	.....	.....
80	Muscowpetung ...	" "	"	81	.....	.....	31	77	.....
4a	Home Farm.....	Qu'Appelle Lakes.	S. Hockley	.....	1	4	.....	.....	.....
79	Pasquah.....	" "	"	97	.....	.....	47	119	.....
78	Standing Buffalo..	" "	"	102	.....	.....	23	110	.....
			Total	440	3	9	150	512	.....

INDIAN RESERVATIONS, &c—*Continued.*

Roots Sown and Harvested.

HILLS.

New Buildings Erected.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.	—	—	—	
3								
4	3							
7	3							A. J. McNeill, Acting Indian Agent.

AGENCY.

Buildings Erected.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.	—	—	—	
6								
3	3							
6	4							
2	5							
17	12							J. B. Lash, Indian Agent.

FARMING AGENCIES AND

Approximate Return of Grain and

SWAN

Reserve No.	Name of Band.	Location.	Name of Instructor.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Grain and Wheat.	Grain and Oats.
								Acres.	Acres.
64	Coté	Swan River Agency.	W. E. Jones	.....	35	62¼	65	1	29
65	Key	" "	"	.....	19½	30	30	.....	12½
66	Kisickouse	" "	"	.....	32	42½	44	.....	17
			Total	.....	86½	134¾	139	1	58½

ASSINIBOINE

No. Reserve.	Name of Band.	Location.	Name of Instructor.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Grain and Wheat.	Grain and Oats.
								Acres.	Acres
76	Carry Kettles	Indian Head	Jas. C. Halford	.....	208	243	10	181	15

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

RIVER.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Rye.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Rye.	Pease.	Garden.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
11¼	11	4	1½	½	4	15	565	220	855	105	.....	.....	.....	1465
7¾	5¾	1	.....	.....	3	.....	250	155	465	60	.....	.....	.....	770
11½	6½	1¾	4¾	¾	¼	.....	350	220	470	105	35	.....	.....	820
30½	23¼	6¾	6¼	1¼	7¼	15	1165	595	1790	270	35	.....	.....	3055

AGENCY.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Onions.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
.....	20	15	3	.....	7	2	2325	300	.....	1570	1875	150	91	650

Note.—Grain not being threshed is given approximately.

FARMING AGENCIES AND

Approximate Return of Grain and

SWAN

Reserve No.	Name of Band.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
						Given under Treaty or on Loan.		Private Property of Indians.	
						Horses.	Oxen.	Horses.	Oxen.
64	Coté	Swan River Agency.	W. E. Jones	218	...	.....	57	69	1
65	Key	" "	"	161	...	.....	10	36	5
66	Kisickouse	" "	"	139	.....	.....	34	38	4
			Total	518	.....	.....	101	143	10

ASSINIBOINE

No. Reserve.	Name of Band.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
						Held under Treaty or on Loan.		Private Property of Indians.	
						Horses.	Oxen.	Horses.	Oxen.
76	Carry Kettles	Indian Head	Jas. C. Halford	190	2	2	54	56	.....

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

RIVER.

New Buildings Erected.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.	—	—	—	
5	7	1	.....	.....	.....	.....	....	Certified correct. W. E. Jones, Indian Agent.
3	4	.. ..	.....	.....	.....	.....	.....	
2	2	..	. ....	.....	.....	.....	.....	
10	13	1	.....	...	.....	.....	.....	

AGENCY.

Buildings Erected.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.	Sheep Pens.	Hen Houses.	—	
2	1	.....	... ..	.....	.....	2	... .	W. J. Grant, Indian Agent.

FARMING AGENCIES AND

Approximate Return of Grain and

TOUCHWOOD

Reserve No.	Name of Band.	Location.	Name of Instructor.	Grain and: Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Wheat.	Oats.
								Acres.	Acres.
85	Muscowequan's	Little Touchwood Hills	W. M. Lambert	.....	41	61	61	4	34½
86	George Gordon's	"	Thos. E. Baker	.....	105½	87½	100	59	17
87	Day Star's	Big Touchwood Hills	Ed. Stanley	.....	10½	21	65	.....	.....
88	Poor Man's	"	"	.....	64½	69¼	129	36	13½
89 and 90	Yellow Quill's	Fishing and Nut Lakes	.....	.....	1½	.....	10	.....	.....
			Total	.....	223	238¾	365	99	65

SADDLE

Reserve No.	Name of Band.	Location.	Name of Instructor.	Gra n and: Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year	Wheat.	Oats.
								Acres.	Acres.
125	Saddle Lake	Saddle Lake, Alta.	None	.....	89⅛	86	610	38	.....
126	Wahsatanow	Hollow Creek, "	"	.....	.....	.....	50	.....	.....
127	Blue Quill's	Saddle Lake, "	"	.....	83⅜	61	220	17	.....
128	James Seenum's	Whitefish Lake, "	Peter Tomkins	.....	348⅜	258	1,500	180	5
130	Chippewayan	Heart Lake, "	None	.....	2	3	.....	.....	.....
131	Beaver Lake	Beaver Lake, "	"	.....	2	3	4	.....	.....
			Total	.....	525½	411	2,384	235	5

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

HILLS AGENCY.

ROOTS SOWN.						GRAIN AND ROOTS HARVESTED.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
5	8½	4	2	.....	3	6	910	85	72	135	39	.....	.....	392
.....	8	1½	1½	.....	½	180	495	.....	704	212	156	53	.....	795
.....	13	5	.....	.....	3	.....	.....	.....	483	367	37	7	.....	544
.....	12	4½	.....	.....	3¼	200	100	.....	651	394	102	60½	.....	403
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
5	41½	15	3½	.....	9¾	386	1505	85	1910	1108	334	120½	.....	2152

LAKE.

ROOTS SOWN.						GRAIN AND ROOTS HARVESTED.								
Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
44	2	.....	1	1	...	62	.....	51	79	.....	32	12	.....	757
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41	1	.....	1	1	.....	56	.....	128	66	.....	29	17	.....	500
60	10	.....	1	1	1	324	30	58	149	.....	20	13	.....	1,100
.....	3	.....	.....	.....	....	.....	.....	.....	150	.....	.....	.....	.....	45
.....	3	.....	.....	.. ..	.. .	.....	.....	.....	150	.....	.....	.....	....	25
145	19	.....	3	3	1	442	30	237	594	.....	81	42	.....	2,427

FARMING AGENCIES AND

Approximate Return of Grain and

TOUCHWOOD

Reserve No.	Name of Band.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
						Given under Treaty or on Loan.		Private Property of Indians.	
						Horses.	Oxen.	Horses.	Oxen.
85	Muscowequan's....	Little Touchwood Hills.....	W.M.Lambert	151	1	.....	12	42	2
86	George Gordon's..	" ..	Thos. E. Baker	151	1	1	32	72	1
87	Day Star's.....	Big Touchwood Hills.....	Ed. Stanley ..	77	1	.....	16	39	.....
88	Poor Man's.....	" ..	" ..	90	1	.....	18	26	.....
89 and 90	Yellow Quill's...	Fishing and Nut Lakes.....	.....	348	.....	.....	2	92	.....
				817	4	1	80	271	3

SADDLE

Reserve No.	Name of Band.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
						Given under Treaty or on Loan.		Private Property of Indians.	
						Horses.	Oxen.	Horses.	Oxen.
125	Saddle Lake.....	Saddle Lake, Alta..	None.....	110	.....	.....	18	50	2
126	Wahsatanow.....	Hollow Creek, " ..	"	.....	.....	.....	.....	10	.....
127	Blue Quill's.....	Saddle Lake, " ..	"	88	.....	.....	21	37	.....
128	James Seenum's...	Whitefish Lake, " ..	Peter Tomkins	278	1	.....	37	130	.....
130	Chippewayan	Heart Lake, " ..	None.....	72	.....	.....	2	4	.....
132	Beaver Lake.....	Beaver Lake, " ..	"	99	.....	.....	.....	.....	.....
			Total.....	647	1	.....	78	231	2

INDIAN RESERVATIONS &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

HILLS AGENCY.

NEW BUILDINGS ERECTED.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
1	.....	.....	.....	.....	.....	.....	.....	The grain is estimated, as the threshing is not yet done.
2	1	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	
3	1	.....	.....	.....	.....	.....	.....	JOHN P. WRIGHT, Indian Agent.

LAKE.

NEW BUILDINGS ERECTED.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	1	.....	.....	.....	.....	.....	These Indians are included in the Saddle Lake Band.
4	4	.....	.....	.....	.....	.....	.....	
2	.....	.....	5	.....	.....	.....	.....	
.....	.....	1	.....	.....	.....	.....	.....	These Indians are hunters and are not settled on a reservation.
.....	.....	.....	.....	.....	.....	.....	.....	
6	4	2	5	.....	.....	.....	.....	JOHN ROSS, Indian Agent.

FARMING AGENCIES AND

APPROXIMATE RETURN OF GRAIN AND

ONION LAKE

Number and Name of Band.	Location.	Name of Farmer in Charge.	GRAIN AND					
			Total acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Wheat.	Oats.
							Acres.	Acres.
Seekaskootch, No. 119	Onion Lake, Saskn.	Geo. G. Mann, Agt	.....	344	545	581	110	6
Home Farm	" "	" "	.....	21	21	25	.....	19
Kinoosayo Chippewayan, No. 124	" "	" "	.....	15	24	24	.....	.....
		Total	.....	380	590	630	110	25

BATTLEFORD

Reserve No.	Name of Band.	Location.	Name of Instructor.	GRAIN AND					
				Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Wheat.	Oats.
								Acres.	Acres.
109	Stony	Eagle Hills	S. Warden	.....	12	25	614	.....	8
108	Red Pheasant's	"	J. Willson	.....	72	$23\frac{9}{16}$	100	$\frac{1}{2}$	10
113	Sweet Grass	Battle River	F.A.D. Bourke	.....	101	35	400	8	10
114	Poundmaker's	"	C. de Gear	.....	49	40	800	15	10
116	Little Pine's	"	"	.....	$92\frac{1}{2}$	$42\frac{1}{2}$	700	10	12
112	Moosomin's	Saskn. River	R. Mair	.....	120	51	610	40	8
115	Thunderchild's	"	R. Finlayson	.....	$83\frac{1}{2}$	53	60	23	11
			Total	.....	530	$270\frac{1}{16}$	3284	$96\frac{1}{2}$	69

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

ROOTS SOWN.							GRAIN AND ROOTS HARVESTED.							
Barley.	Potatoes.	Turnips.	Carrots.	Timothy Hay.	Garden.		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres		Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
400	15	10	.....	.....	4	.....	736	36	3750	891	.....	.....	.....	1200
.....	½	¼	¼	½	½	.....	.....	99	.....	100	20	.....	.....	1800
12	8	?	.....	....	2	.....	.....	.....	125	420	.....	.....	.....	800
412	23½	12¼	¼	½	6½		736	135	3875	1411	20	.....	...	3800

AGENCY.

ROOTS SOWN.							GRAIN AND ROOTS HARVESTED.							
Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden.		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres		Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
6	6	4	1	....	.....	.....	.....	186	57	610	350	50	.....	600
5	4	½	1/16	1/16	3½	.....	5	186	100	698	186	2¾	1	1075
8	5	.....	.....	.....	4	.....	45	160	15	200	125	12½	2½	750
5	2	4½	½	1	2	...	6	.....	.....	20	60	13	.....	325
9	3	4	½	.....	3	.....	.....	.....	....	109	84	.....	.....	325
7	5	4	.....	.....	2	.....	434	50	.....	305	30	4	.....	450
9	6	.....	.....	.....	4	.....	40	56	.....	318	291	.....	.....	400
49	31	17	2 1/16	1 1/16	18½	.....	530	638	172	2260	1126	82¼	3½	3925

FARMING AGENCIES AND

Approximate Return of Grain and

ONION LAKE

Number and Name of Band.	Location.	Name of Farmer in Charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
					Held under Treaty or on Loan.		Private Property of Indians.	
					Horses.	Oxen.	Horses.	Oxen.
Seekaskootch, No. 119	Onion Lake, Saskn.	Geo. G. Mann, Agt.	360	2	.....	11	51	54
Home Farm	" "	" "	.....	.....	.....	.....	.....	.....
Kinoosayo, Chippewayan, No. 124	" "	" "	152	.....	.....	.....	62	15
		Total	512	2	.....	11	113	69

BATTLEFORD

Reserve No.	Name of Band.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Men employed, including Inspector.	Horses and Cattle.			
						Held under Treaty or on Loan.		Private Property of Indians.	
						Horses.	Oxen.	Horses.	Oxen.
109	Stony	Eagle Hills	S. Warden	93	1	.....	45	45	.....
108	Red Pheasant's	"	J. Willson	135	1	12	52	35	.....
113	Sweet Grass	Battle River	F. A. D. Bourke	126	1	.....	35	45	.....
114	Poundmaker's	"	C. de Gear	123	2	.....	26	40	.....
116	Little Pine's	"	"	129		.....	31	30	.....
112	Moosomin's	Saskn. River	R. Mair	119	1	.....	26	30	.....
115	Thunderchild's	"	R. Finlayson	176	1	.....	50	43	.....
			Total	901	7	12	265	268	.....

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

BUILDINGS ERECTED DURING YEAR.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
								The potatoes were a light crop. Although a fair size, there were few in a hill. The Indian houses and stables have all been repaired, enlarged. The number remains the same.
.....	.....	.....	.....	.....	.....	.....	.....	54 oxen, shown as private property of Indians, are the offspring of cattle loaned.
.....	.....	.....	.....	.....	.....	.....	.....	Band No. 124.—These Indians do not put in much crop but live chiefly by hunting, fishing and stock raising.
.....	.....	.....	.....	.....	.....	.....	.....	Certified correct, GEO. G. MANN, Indian Agent.

AGENCY.

BUILDINGS ERECTED.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
7	3	.....	.....	.....	.....	.....	.....	
5	12	.....	.....	.....	.....	.....	.....	
4	3	.....	.....	.....	.....	.....	.....	Onions and carrots acreage under gardens.
2	4	.....	.....	.....	.....	.....	.....	
3	3	.....	.....	.....	.....	.....	.....	All grain was destroyed by fire from steam thresher.
3	4	.....	.....	.....	.....	.....	.....	
4	5	.....	.....	.....	.....	.....	.....	P. J. WILLIAMS.
28	34	.....	.....	.....	.....	.....	.....	

FARMING AGENCIES AND

Approximate Return of Grain and

PIEGAN

Number and Name of Band.	Location.	Name of Farmer in Charge.	Grain and					
			Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Wheat.	Oats.
							Acres.	Acres.
Agency...	Piegan Reserve.....	J. W. Smith.....	.....	18	8½	15	.....	5
Piegan, No. 147...	"	J. W. Smith and W. H. Cox.....	.....	116	107½	289	.....	86
		Total.	.....	134	116	304	.....	91

BLACKFOOT

Reserve No.	Location.	Name of Instructor.	Grain and					
			Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Wheat.	Oats.
							Acres.	Acres.
146	South Blackfoot Reserve..	G. H. Wheatley.....	.....	181	143½	332	15	72
146	North Blackfoot Reserve...	W. M. Baker.....	.....	113	89	237	.....	33
		Tota.....	.....	294	232½	569	15	105

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

AGENCY.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Pease.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
.....	2½	.....	.....	.....	1	.....	30	.....	225	.....	.....	.....	.....	55
.....	17½	.....	.....	.....	4	.....	602	.....	1,550	.....	.....	.....	.....	330
.....	20	.....	.....	.....	5	.....	632	.....	1,775	.....	.....	.....	.....	385

AGENCY.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
30	20¼	4¼	1	1	.....	16	150	142	2410	288	32	20	.....	275 *136
25	12	.....	.....	.....	19	.....	.....	.....	690	60	5	5	.....	322 *130
55	32¼	4¼	1	1	19	16	150	142	3100	348	37	25	.....	863

*Grain crop cut green for hay.
Note.—Grain crop very light. Potatoes good. Plenty of seed stored for next year's planting.

FARMING AGENCIES AND

Approximate Return of Grain and

PIEGAN

Number and Name of Band.	Location.	Name of Farmer in Charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Held under Treaty or on Loan. Horses.	Held under Treaty or on Loan. Oxen.	Private Property of Indians. Horses.	Private Property of Indians. Oxen.
Agency.....	Piegan Reserve.....	J. W. Smith.....	.....	3	6	.....	.....	.....
Piegan, No. 147...	"	J. W. Smith and W. H. Cox.....	750	.....	.....	28	506	.....
		Total.....	750	3	6	28	506	....

BLACKFOOT

Reserve No.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Menemployed, including Instructor.	Horses and Cattle. Given under Treaty or on Loan. Horses.	Given under Treaty or on Loan. Cows.	Private Property of Indians. Horses.	Private Property of Indians. Cows.
146	South Blackfoot Reserve..	G. H. Wheatley.....	595	2	.....	.....	1094	21
146	North Blackfoot Reserve...	W. M. Baker.....	600	2	.....	.....	979	55
		Total.....	1195	4	.....	.....	2073	76

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

BUILDINGS ERECTED DURING YEAR.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
1	1	.....	.....	.....	.....	.....	.....	
4	6	.....	3	.....	.....	.....	.....	
5	7	.....	3	.....	.....	.....	.....	H. H. NASH, Indian Agent.

AGENCY.

NEW BUILDINGS ERECTED.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.	Fowl House.			
9	4	. . .	2	.....	.....	.....	.....	A quantity of grain which could not ripen on account of wet weather was cut green and shown as straw. A number of old houses were used as firewood. Nine more cows have been taken by Indians this year, making, with the increase of the former six, 21 head on this reserve.
15	8	....	7	.....	1	.....	.....	Fifteen new houses have been built; some old ones were pulled down. None of the grain ripened. It was cut green, and the straw shown in bulk. Turnips, carrots and onions were very poor, and, with the exception of Little Axe's, none were harvested. He has 60 bush. of turnips, 5 bush. of carrots and 5 of onions stored for winter. The 19 acres gardens were omitted from June work return. Little Axe owns 33 of the 55 head of cattle. There is no increase in the number of acres fenced (201), some old fields having been abandoned.
24	12	.. ...	9	....	1	.....	.....	Examined. MAGNUS BEGG, Indian Agent.

FARMING AGENCIES AND

Approximate Return of Grain and

SARCEE

Reserve No.	Name of Band.	Location.	Name of Instructor.	Grain and: Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Wheat.	Oats.
								Acres.	Acres.
145	Bull Head's	Sarcee Reserve			56	88½	34	21½	19
		Home Farm			35	88¾	55	13	11
			Total		91	177	89	34½	30

STONY

Number and Name of Band.	Location.	Name of Farmer in Charge.	Grain and: Total acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Wheat.	Oats.
							Acres.	Acres.
Home Farm	Stony Reserve	P. L. Grasse		4½	1	100		
142, 143, 144	Morley, Alta.			28½	60¾	525		47
		Total		33	61¾	625		47

BLOOD

Number and Name of Band.	Location.	Name of Farmers in Charge.	Grain and: Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Wheat.	Oats.
							Acres.	Acres.
148	Belly River, near Macleod	Edw. McNeil.. A. E. Jones... C. H. Clarke...		263¾	346¼	517	11	274¾

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

AGENCY.

Roots Sown.						Grain and Roots Harvested.						
Barley.	Potatoes.	Turnips.	Carrots.	Beets.	Garden.	Green Feed.	Potatoes.	Turnips.	Carrots.	Beets.	Garden.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Tons.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
45	2¼	¼	¼	.....	.....	150	117	.....	.....	.....	.....	110
60	1	2	1¼	½	.....	168	51	60	.....	.....	.....	95
105	3¼	2¼	1½	½	.....	318	168	60	.....	.....	.....	205

AGENCY

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.		Wheat.	Oats.	Barley.	Potatoes.	Garden Stuff.	Carrots.	Pease.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres		Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
.....	10½	.....	.....	.....	3¼	.....	.....	.....	.....	16	.....	.....	.....	45
.....		.....	.....	.....		.....	.....	.....	.....	394	36	.....	.....	150
.....	11¼	.....	.....	.....	3½	.....	.....	.....	.....	410	36	.....	.....	195

AGENCY.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres		Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
11½	31⅜	½	.....	.....	70⅛	.....	85	2582	126	1428	30	.....	.....	1362

FARMING AGENCIES AND

Approximate Return of Grain and

SARCEE

Reserve No.	Name of Band.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Given under Treaty or on Loan. Horses.	Oxen.	Private Property of Indians. Horses.	Oxen.
145	Bull Head's	Sarcee Reserve.....	.....	226	2	3	6	462	.....
		Home Farm.....	.....	.....	.....	5	16	.....	.....
			Total....	226	2	8	22	462	.....

STONY

Number and Name of Band.	Location.	Name of Farmer in Charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Held under Treaty or on Loan. Horses.	Oxen.	Private Property of Indians. Horses.	Oxen.
Home Farm.....	Stony Reserve.	P. L. Grasse.....	.....	.....	.....	.....	.....	.....
142, 143, 144.....	Morley, Alta.....	.....	570	1	.....	6	900	.....
		Total	570	1	.....	6	900	.....

BLOOD

Number and Name of Band.	Location.	Name of Farmers in Charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Held under Treaty or on Loan. Horses.	Oxen.	Private Property of Indians. Horses.	Oxen.
148.....	Belly River, near Macleod.....	Edw. McNeil.. A. E. Jones.... C. H. Clarke...	1330	5	.....	25	1828	.....

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

NEW BUILDINGS ERECTED.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
11	1	.....	.....	.....	.....	.....	.....	
.....	1	...	.....	.....	.....	.....	.....	Certified correct, SAMUEL B. LUCAS, Indian Agent.
11	2	.....	.....	.....	.....	.....	.....	

AGENCY.

NEW BUILDINGS ERECTED.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
.....	.....	.....	.....	.....	.....	.....	.....	
9	9	.....	.....	.....	.....	.....	.....	
9	9	.....	.....	.....	.....	.....	.....	P. L. GRASSE, Farmer.

AGENCY.

BUILDINGS ERECTED DURING YEAR.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
23	10	.....	.....	.....	.....	.....	.....	JAS. WILSON, Indian Agent.

FARMING AGENCIES AND

Approximate Return of Grain and

CROOKED LAKE

Reserve No.	Name of Band.	Location.	Name of Farmer in Charge.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Grain and Wheat.	Grain and Oats.
								Acres.	Acres.
....	Ochapowace	Crooked Lake....	Isaac Pollock....	.....	3	3½	6	.....	3½
71	.....	.....	.....	.....	102¼	101	350	76	18½
....	Kahkewistahaw ..	Crooked Lake....	James Pollock..	.....	3	4	5	.....	4
72	.....	.....	.....	.....	113½	124⅝	300	117	.....
....	Cowesess.....	Crooked Lake....	J. A. Sutherland	.....	6	6	20	.....	6
73	.....	.....	.....	.....	255¾	253⅛	800	200	36
....	Sakimay.....	Crooked Lake....	Malcolm Calder.	.....	7	5	5	.....	5
74	.....	.....	.....	.....	81½	96¼	150	81	10
			Total.....		572	593½	1636	474	83

DUCK LAKE

Reserve No.	Name of Band.	Location.	Name of Farmer in charge.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Grain and Wheat.	Grain and Oats.
								Acres.	Acres.
95	One Arrow's.....	5 miles from Batoche	Louis Marion.	.....	119¼	125	29	107	5
96	Okemasis.....	Near Duck Lake....	Law. Lovell..	.....	53⅜	43	.....	34	3
97	Beardy's.....	"	" ..	.....	244½	170	....	130	20
99	John Smith's....	South Branch, Sask.	J. H. Price...	.....	202½	246	10	70	153
100	James Smith's....	Fort à la Corne.....	Jno. H. Gordon	.....	31	49	31	37	5
100a	Big Head's.....	"	" ..	.....	18	20	2	17	..
100a	Cumberland.....	"	" ..	.....	11	20	.....	8	7
			Total.....	.....	679⅞	673	72	403	193

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

AGENCY.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Onions.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
.....	.....	.....	.....	.....	.....	.....	70	.....	.....	.....	.....	.....	.....	12
.....	4½	1⅛	.....	.....	¾	140	200	.....	275	250	.....	.....	.....	350
.....	.....	.....	.....	.....	.....	.....	100	.....	.....	.....	.....	.....	.....	8
.....	6	1	.....	.....	⅜	1,330	.....	.....	415	.....	.....	.....	.....	350
.....	.....	.....	.....	.....	.....	.....	280	.....	.....	.....	.....	.....	.....	8
.....	13¾	⅞	.....	.....	2½	1,590	1,040	.....	1,240	250	.....	.....	.....	605
.....	.....	.....	.....	.....	.....	.....	150	.....	.....	.....	.....	.....	.....	18
..	3¼	.....	...	...	2¼	250	200	.....	152	25	.....	.....	.....	481
.....	27½	3	.....	.....	6⅛	3,310	2,040	.....	2,082	525	.....	.....	.....	1,832

AGENCY.

Roots Sown.						Grain and Roots Harvested.								
Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Onions.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
6	5	1¼	¼	½	.....	813	68	.....	286	200	30	.....	10	400
2	2¼	1⅛	1/16	1/16	.....	9	.....	.....	36	4	1¾	.....	2	200
8	4	7	⅛	⅛	.....	165	39	6	158	259	14	.....	7	700
10	7	2	⅛	⅛	3¾	927	2,491	275	235	25	10	.....	5	900
.....	5¼	1	¼	¼	.....	262	21	.....	23	.....	.....	.....	.....	393
.....	2⅜	¼	¼	⅜	.....	95	.....	.....	38	.....	.....	.....	.....	266
2	2⅛	½	¼	⅛	.....	31	52	10	32	.....	.....	.....	.....	262
28	27¾	13¾	2 1/16	2 1/16	3¾	2,302	2,671	291	808	488	55¾	.....	24	3,121

FARMING AGENCIES AND

APPROXIMATE RETURN OF GRAIN AND

CROOKED LAKE

Reserve No.	Name of Band.	Location.	Name of Farmer in Charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Held under Treaty or on Loan. Horses.	Held under Treaty or on Loan. Oxen.	Private Property of Indians. Horses.	Private Property of Indians. Oxen.
....	Ochapowace	Crooked Lake....	Isaac Pollock....	...	1	2	.....	.....	.....
71	.....	.....	.....	117	.....	.....	20	38	1
....	Kahkewistahaw ..	Crooked Lake....	James Pollock..	.....	1	6	.....	.....	.....
72	.....	.....	.....	133	.....	.....	31	30	.....
....	Cowesses.....	Crooked Lake....	J. A. Sutherland	...	1	3	.....	.....	.....
73	.....	.....	.....	158	.....	.....	24	60	6
....	Sakimay.....	Crooked Lake....	Malcolm Calder.	.....	1	2	.....	.....	.....
74	.....	.....	.....	208	.....	.....	21	64	.....
			Total.	616	4	13	96	192	7

DUCK LAKE

Reserve No.	Name of Band.	Location.	Name of Farmer in charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Given under Treaty or on Loan. Horses.	Given under Treaty or on Loan. Oxen.	Private Property of Indians. Horses.	Private Property of Indians. Oxen.
95	One Arrow's.....	5 miles from Batoche	Louis Marion.	69	1	.....	27	42	.....
96	Okemassis.....	Near Duck Lake....	Law. Lovell..	14	1	.....	9	8	.....
97	Beardy's.....	"	" ..	81		.....	31	20	.....
99	John Smith's.....	South Branch, Sask.	J. H. Price...	95	1	.....	32	29	5
100	James Smith's....	Fort à la Corne	Jno. H. Gordon	106		.....	20	39	.....
100a	Big Head's.....	"	" ..	42	1	.....	19	30	.....
100a	Cumberland	"	" ..	40					
			Total.....	447	4	.....	138	168	5

INDIAN RESERVATIONS, &c.—*Continued.*

Roots Sown and Harvested.

AGENCY.

Buildings Erected during Year.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
.....	.....	.....	.....	.....	.....	.....	.....	The wheat threshed is a mixed sample, some good, some fair, and some very poor, only fit for pig and poultry feed. The percentage of good is, however, the largest.
.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	The produce of gardens was chiefly consumed during the summer, although most Indians have each some carrots and onions in their cellars.
.....	.....	.....	.....	.....	.....	.....	.....	
2	2	.....	.....	.....	.....	.....	.....	
2	2							Certified correct, A. McDonald, Indian Agent.

AGENCY.

Buildings Erected during Year.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	At John Smith's the grain crop was good.
.....	.....	.....	.....	.....	.....	.....	.....	The small average of grain put in at La Corne shows a poor yield owing to unfavourable weather, but the quality is fair.
.....	...	.....	.....	.....	.....	.....	.....	
.....	1	.....	.....	.....	.....	.....	.....	An abundance of hay has been secured on all the reserves.
.....	1	.....	.....	.....	.....	.....	.....	
2	.....	.....	.....	.....	.....	.....	.....	Certified correct. R. S. McKenzie, Indian Agent.
2	2	.....	.....	.....	.....	.....	.....	

FARMING AGENCIES AND

Approximate Return of Grain and

EDMONTON

Reserve No.	Name of Band.	Location.	Name of Farmer in Charge.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	Grain and: Wheat.	Grain and: Oats.
								Acres.	Acres.
135	Enoch	Stony Plain			180	171	100	88	30
132	Michel	Sturgeon River			150	118	29	44	40
134	Alexander	Rivière qui barre	W. J. O'Donnell		188	219	200	113	16
133	Joseph	Lac Ste-Anne			28	39	25	10	.....
133a	White Whale Lake	White Whale Lake			35	63¾	60	21	2
			Total		581	610¾	405	276	88

HOBBEMA

Reserve No.	Name of Band.	Location.	Name of Farmer in charge.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced.	Grain and: Wheat.	Grain and: Oats.
								Acres.	Acres.
138	Samson	Battle River	D.L. Clink, Indian Agent		266	312	547	211	7
137	Ermineskin	Bear's Hills	A. E Moore		214	238	426	178	12
140	Louis Bull	"	"		77	93	188	68	8
....	Home Farm	.....	"	.....	.....	.....	.....	.....	Cut green. 3
			Total	.....	557	643	1,161	457	30

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

ROOTS SOWN.						GRAIN AND ROOTS HARVESTED.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Hay cut.
Acres	Acres	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
39	6	3	.....	.....	5	642	446	255	730	130	.....	.....	600	500
25	4	3	.....	.....	2	295	480	360	500	150	.....	.....	250	300
80	6	.....	.....	.....	4	686	230	592	1,400	.....	.....	.....	1,000	700
26	3	.....	.....	.....	2	90	.....	230	400	.....	.....	.....	1,600	180
35	3	.....	.....	.....	$2\frac{3}{4}$	220	30	296	800	.....	.....	.....	1,470	200
205	22	6			$15\frac{3}{4}$	1,933	1,186	1,733	3,830	280	.....	.....	4,320	1,880

AGENCY.

ROOTS SOWN.						GRAIN AND ROOTS HARVESTED—ESTIMATED.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Hay cut.
Acres	Acres	Acres	Acres	Acres		Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
75	10	5	2	.....	2	2,110	140	1,125	1,500	800	.....	.....	.....	600
41	4	2	.....	.....	1	1,780	240	615	600	350	.....	.....	.....	400
14	1	1	.....	.....	1	680	160	210	150	150	.....	.....	.....	200
.....	.....	.....	.....	3	2	.....	.....	.....	.....	.....	.....	15	.....	25
130	15	8	2	3	6	4,570	540	1,950	2,250	1,300	.....	15	.....	1,225

FARMING AGENCIES AND

Approximate Return of Grain and

EDMONTON

Reserve No.	Name of Band.	Location.	Name of Farmer in Charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Held under Treaty or on Loan. Horses.	Held under Treaty or on Loan. Oxen.	Private Property of Indians. Horses.	Private Property of Indians. Oxen.
135	Enoch	Stony Plain		130			37	60	
132	Michel	Sturgeon River		37		2	2	16	
134	Alexander	Rivière qui barre	W. J. O'Donnell	160	1		27	49	
133	Joseph	Lac Ste-Anne		60			9	30	
133a	White Whale Lake	White Whale Lake		90			13	20	
			Total	477	1	2	88	175	

HOBBEMA

Reserve No.	Name of Band.	Location.	Name of Farmer in charge.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle. Held under Treaty or on Loan. Horses.	Held under Treaty or on Loan. Oxen.	Private Property of Indians. Horses.	Private Property of Indians. Oxen.
138	"Samson"	Battle River	D.L. Clink, Indian Agent	295			46	120	2
137	"Ermineskin"	Bear's Hills	A. E. Moore.	172	1		48	40	1
140	"Louis Bull"	"	"	55			17	25	
....	Home Farm		"						
			Total	522	1		105	185	3

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

BUILDINGS ERECTED DURING YEAR.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
5	9	.....	.....	.....	.....	.....	.....	Gardens include carrots, onions, beets, beans, cabbage and tobacco.
1	3	.....	.....	.....	.....	.....	.....	
2	4	.....	.....	.....	.....	.....	.....	Certified correct,
2	2	.....	.....	.....	.....	.....	.....	CHS. DE CAZES,
3	4	.....	.....	.....	.....	.....	.....	Indian Agent.
13	22							

AGENCY.

NEW BUILDINGS ERECTED.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
4	4	.....	.....	.....	.....	.....	.....	
7	7	.....	.....	.....	.....	.....	.....	
1	3	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	
12	14	.....	.....	.....	.....	.....	.....	D. L. CLINK, Indian Agent.

FARMING AGENCIES AND

APPROXIMATE RETURN OF GRAIN AND

CARLTON

Reserve No.	Name of Band.	Location.	Name of Instructor.	Total Acres broken during year.	Acres under crop last year.	Acres under crop this year.	Acres fenced during year.	GRAIN AND Wheat.	Oats.
								Acres.	Acres.
101	Twatt.....	Sturgeon Lake....	H. Richardson..	....	46½	60	75	40	10
102	Petaquakey	Muskeg Lake.....	.....	.....	54⅝	52⅓	180	34	2
103	Mistawasis..	Snake Plain	.....	.....	115½	166½	275	125	14
104	Ahtahkakoop.....	Sandy Lake	L. Couture.....	21	196	231	325	184	19
106	Kenemotayoo*....	Stony Lake and Whitefish Lake..	.....	18	1¼	2	2	.....	.....
94a	Sioux, Wahspaton.	Round Plain....	H. Richardson..	10	4	29¾	30	20	5
			Total.....	49	417⅞	541¾	887	403	50

*No reserve yet set apart.

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

ROOTS SOWN.						GRAIN AND ROOTS HARVESTED.								
Barley.	Potatoes.	Turnips.	Carrots.	Pease.	Garden.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Garden roots.	Hay cut.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons.
.....	8	.....	.. .	.....	2	177	.....	.....	185	.....	... .	.....	10	430
8	4½	1½	.....	.....	2⅓	.....	.....	.....	159	14	....	.....	12	189
17	8	.....	.....	.....	2½	95	66	48	259	.....	.....	.....	54	600
15	10	.....	.....	.....	3	2320	205	167	441	140	16	3	... ..	972
.... .	2	.....	.. .	.....	.....	.....	.....	....	108	.....	.....	.....	.....	60
.....	3	....	.....	.....	1¾	290	90	.....	171	.....	.....	... .	80	75
40	35½	1½	.....	.....	11¾	2882	361	215	1323	154	16	3	156	2326

FARMING AGENCIES AND

APPROXIMATE RETURN OF GRAIN AND

CARLTON

Reserve No.	Name of Band.	Location.	Name of Instructor.	Approximate Number of Indians on Reserve.	Men employed, including Instructor.	Horses and Cattle.			
						Held under Treaty or on Loan.		Private Property of Indians.	
						Horses.	Oxen.	Horses.	Oxen.
101	Twatt	Sturgeon Lake	H. Richardson	124	33	.....	15	60	3
102	Petaquakey	Muskeg Lake	.....	40	13	.....	13	11	.....
103	Mistawasis	Snake Plain	.....	114	22	1	33	35	2
104	Ahtahkakoop	Sandy Lake	L. Couture	200	32	1	56	46	2
106	Kenemotayoo*	Stony Lake and Whitefish Lake	.....	.....	....	.....	2	.....	....
94a	Sioux, Wahspaton.	Round Plain	H. Richardson	38	7	.....	4	.....	....
			Total	516	107	2	123	152	7

*No reserve yet set apart.

INDIAN RESERVATIONS, &c.—*Continued.*

ROOTS SOWN AND HARVESTED.

AGENCY.

BUILDINGS ERECTED DURING YEAR.								Remarks.
Houses.	Stables.	Store Houses.	Root Houses.	Pig Styes.				
2	2	.....	.....	.....	.....	.....	.....	Several houses improved.
.....	.....	.....	.....	.....	.....	.....	.....	Additions, new roofs and upper floors have been made in several houses.
2	5	.....	.....	.....	.....	.....	.....	" " " "
3	4	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	
3	3	.....	.....	.....	.....	.....	.....	
10	14	.....	.....	.....	.....	.....	.....	HILTON KEITH, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Birtle Agency, season of 1895.

BIRD TAIL SIOUX RESERVE, No. 57.

Names of Indians.	ACRES SOWN.										BUSHELS HARVESTED.											Remarks.
	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Gardens.	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Hay—Tons.	Gardens.	
Moses Bull	50	12	....	....	·75	....	....	....	50	·07	1050	518	....	....	60	....	....	....	20	25	10	Garden stuff consisted of onions and carrots.
Old Bull	10	2	....	....	·50	....	....	....	·75	·07	186	20	....	....	40	....	....	....	30	10	15	
Isaac Thunder	10	4	....	....	·50	....	....	....	·25	·07	200	76	....	....	8	....	....	....	15	10	5	
Charley Hanska	25	4	....	....	·25	....	....	....	·25	·07	600	88	....	....	20	....	....	....	15	20	5	
Awican-han	20	4	....	....	1·00	....	....	....	1·00	·25	638	50	....	....	80	....	....	....	40	15	20	
Henry Enoch	10	4	....	....	·50	....	....	....	1·50	·13	164	100	....	....	40	....	....	....	40	15	20	
Boh-pa	16	4	....	....	1·00	....	....	....	1·00	·07	440	62	....	....	80	....	....	....	40	15	20	
Alex. Ben	28	3	....	....	....	....	....	....	·25	·07	490	44	....	....	....	....	....	....	10	15	5	
Sunka Ho Wahon	45	15	....	....	·50	....	....	....	·50	·07	1048	292	....	....	40	....	....	....	20	15	10	
Wahukeza	10	..	....	....	..	....	....	....	·50	·07	338	..	....	....	....	....	....	....	20	12	10	
Maka-iea-hota	6	2	....	....	·25	....	....	....	1·00	·07	136	82	....	....	20	..	....	....	40	10	20	
Silas Boh-pa	10	3	....	....	....	....	....	....	·25	....	250	82	....	....	....	....	....	....	10	5	5	
Big Hunter	12	....	....	..	·13	....	....	....	·13	....	288	.....	....	....	10	....	....	....	6	10	3	
Mrs. David	....	....	....	....	....	....	....	....	·25	·07	....	....	....	....	....	....	....	....	10	....	2	
Wah'pa Hota	5	....	....	....	·13	....	....	....	·13	....	168	....	....	....	10	....	....	....	6	5	..	
Mrs. Sioux Jack	....	....	....	....	....	....	....	....	·13	·07	.....	.....	.....	.....	.....	.....	.....	.....	6	....	2	
Wah-puya-dulta	..	....	....	....	....	....	....	....	·13	·07	.....	.....	.....	.....	.....	.....	.....	.....	6	10	2	
Blackface	....	....	....	....	·25	....	....	....	·50	·07	.....	.....	.....	.....	20	.....	.....	.....	20	15	2	
Bohuilda	10	2	....	....	..	....	....	....	·25	·07	294	30	....	....	.....	.....	.....	.....	10	15	2	
Mrs. Bear Bull	....	....	....	....	....	....	....	....	·13	·07	.....	.....	.....	.....	.....	.....	.....	.....	6	....	2	
Wagin Nopin	5	....	....	....	....	....	....	....	....	....	154	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Total	272	59			5·76				9·40	1·43	6414	1444			428				370	222	160	J. A. MARKLE, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Birtle Agency, season of 1895.

OAK RIVER SIOUX RESERVE, No. 58.

Names of Indians.	ACRES SOWN.										BUSHELS HARVESTED.										Remarks.
	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Gardens.	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Hay—Tons.	Gardens.	
Ha'pa		2										37								13		Garden stuff consisted of onions and carrots.
Pampana	15	5			25				13	07	259	100			20				5	25	2	
Mato-skan-dan	8				25				13	07	160				20				5	20	2	
John Noël		7			50				13	07		48			40				5	21	2	
Pah'doka Sni	16	8			25				13	07	323	83			20				5	23	2	
Tom-maza-kaga	7				25					04	74				20					16	1	
Tasnia Wakanhdi	22										434									32		
Harry Hobannia	25				25				13	07	735				25				5	22	2	
Wahcunea					25				13	04					20				5	10	1	
Waste	1										34									10		
Wasudan	4				25				13		100				20				5	6		
Mah'yipa Ska	40	6			25				13		1129	138			25				5	8		
Antoine Hoke					25				13	07					25				5		2	
Waste Antoine	7				25				13	07	93				25				5	19	2	
Sunka Maza	7				25				13	04	45				25				5	12	1	
Mrs. Tawana	3				50				25	07					50				5	4	2	
Wacanta	25				50				13	07	553				50				5	25	2	
John Sioux	7				25				13	13	169				25				5	17	4	
Zuka-to-koyaga-mani					50				25	13					40				10	32	4	
Eli Aicage	13	5			25				13	07	432	132			25				5	18	2	
Hoye Tanka	10	5			50				25	07	340	83			45				10	20	2	
He Waste	4				25				13	07	126				25				5	10	2	
William Wamdiska	10	6							13	07	232	225							8	22	2	
Charlie Dowan	40	10			50				25	13	309	285			50				10	18	4	
Canh-deska Sapa	6				25				13	07	188				20				5	6	2	
Wambdi-na	7	5			25				13	07	160	124			25				5	14	2	
Sunkaska					25				13	07					25				5		2	
Turara	26	4			25				13	07	705				25				5	7	2	
John McLeod	3										54											
Nepan Hanska					25				25	07					25				10	2	2	
Sam Hobannia	14				25				13	07	428				25				15	10	2	
Carried forward	320	63			8 00				3 98	1 84	7082	1255			740				163	442	53	

RETURN showing Crops sown and harvested by individual Indians in Birtle Agency, season of 1895.

OAK RIVER SIOUX RESERVE, No. 58—*Continued.*

Names of Indians.	ACRES SOWN.										BUSHELS HARVESTED.											Remarks.
	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Gardens.	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Hay Tons.	Gardens.	
Brought forward..	320	63	....	....	8·00	..	....	....	3·98	1·84	7082	1255	....	....	740	....	....	....	163	442	53	
Chaske Jackson	....	....	....	....	....	..	....	....	....	....	81	....	....	....	....	....	....	....	....	6	....	Volunteer crop.
Taealipi Waste-sté	30	....	....	....	·25	....	....	....	·13	·07	832	....	....	....	25	....	....	....	5	8	2	
Coot Ape	6	....	....	....	·25	....	....	....	·13	....	60	....	....	....	25	....	....	....	5	16	....	
John Little Crow	4	6	1	....	·25	....	..	....	·13	·07	77	282	34	....	25	....	....	....	5	20	2	
Tuyombena	6	....	....	....	....	....	....	....	....	....	310	....	....	....	....	....	....	....	....	....	....	
Hoksidan Ska	12	....	....	....	·13	....	....	....	·13	....	135	....	....	....	15	....	....	....	5	8	....	
Wan Duta	....	....	....	....	·25	....	....	....	·13	....	....	....	....	....	25	....	....	....	5	5	....	
Mrs. Tanin-yahdinazin	3	....	....	....	·13	....	....	....	·13	·07	42	....	....	....	10	....	....	....	5	....	2	
Tacah-piyuh-nazin	16	....	....	....	·13	....	....	....	·13	....	441	....	....	....	10	....	....	....	5	19	....	
Tunkan-cekiya-na..	5	....	....	....	1·00	....	..	....	·13	·13	147	....	....	....	80	....	....	....	5	10	4	
Top-ah-di-nazin	5	....	....	....	·25	....	....	....	·13	·07	152	....	....	....	25	....	....	....	5	7	2	
Mini-waho-hanon	16	6	....	....	·25	....	....	....	·13	·07	386	161	....	....	20	....	....	....	5	15	2	
Wasicun-na	12	1	..	....	·25	....	....	....	·13	....	222	17	....	....	20	....	....	....	5	8	....	
Saste-na	3	....	....	....	·25	....	....	....	·13	....	54	....	....	....	20	....	....	....	5	....	....	
Ahanziya	12	....	....	....	·25	....	....	....	·13	·07	212	....	....	....	20	....	....	....	5	10	2	
Skudan	....	....	..	....	·25	....	....	....	·13	....	....	....	....	....	25	....	....	....	5	....	....	R. W. SCOTT, Farmer.
Kinyan Wakan	16	....	....	....	·13	....	....	....	·13	·07	265	....	....	....	10	....	....	....	5	27	2	
Caske Hanska	50	7	....	....	·25	....	....	....	·25	·07	1176	121	....	....	10	....	....	....	5	16	2	
Total	516	83	1	....	12.27	...	..	....	6·18	2·53	11674	1836	34	....	1105	....	....	....	243	617	73	J. A. MARKLE, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Birtle Agency, season of 1895.

OAK LAKE SIOUX RESERVE, No. 59.

Names of Indians.	ACRES SOWN.										BUSHELS HARVESTED.											Remarks.
	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Gardens.	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Corn.	Hay—Tons.	Gardens.	
Sunka Waste	8	3	....	....	·50	....	....	....	·50	·25	150	50	....	....	40	....	....	....	20	10	5	Garden stuff consisted of onions and carrots.
Ampetu Wambai	15	....	....	....	·25	....	....	....	·25	·07	270	....	....	....	20	....	....	....	10	....	3	
Waoke	25	8	....	....	·13	....	....	....	·13	·04	450	120	....	....	10	....	....	....	6	....	2	
Mato-Cuwin Yuksa	8	....	....	....	·50	....	....	....	25	·04	150	....	....	....	40	....	....	....	10	10	2	
Ka-iyo Waza	....	....	....	....	·25	....	....	....	·25	·04	....	....	....	....	20	....	....	....	10	8	2	
Hepan Chistena	....	....	....	....	·13	....	....	....	....	·04	....	....	....	....	10	....	....	....	....	5	2	
Chat Ka	....	....	....	....	....	....	....	....	....	·07	....	....	....	....	....	....	....	....	....	5	4	
Old Woman	....	....	....	....	....	....	....	....	....	·04	....	....	....	....	....	....	....	....	....	....	2	
Total	56	11	....	....	1·76	....	....	....	1·38	·59	1020	170	....	....	140	....	....	....	56	38	22	J. A. MARKLE, Indian Agent.

TURTLE MOUNTAIN SIOUX RESERVE, No. 60.

Hda Mani	....	5¼	....	....	1·00	....	....	....	2·25	·25	....	80	....	....	75	....	....	....	30	12	....	Quantity of oats approximate. Do not intend to thresh, but to feed to stock in straw.
Bogaga	....	....	....	....	·75	....	....	....	·25	·25	....	....	....	....	30	....	....	....	5	12	....	
Old Mary	....	4½	....	....	1·25	....	....	....	·13	·07	....	70	....	....	55	....	....	....	3	15	....	
Custo Pitowan	....	....	....	....	·50	....	....	....	·25	·07	....	....	....	....	57	....	....	....	5	10	....	
Kilbana Hota	....	....	....	....	1·00	....	....	....	·50	·07	....	....	....	....	125	....	....	....	8	10	....	Garden stuff used when growing corn damaged by early frosts.
Patonkanopa	....	....	....	....	·25	....	....	....	·07	·13	....	....	....	....	6	....	....	....	2	8	....	
Total	....	9¾	....	....	4·75	....	....	....	3·45	·84	....	150	....	....	348	....	....	....	53	67	....	

RETURN showing Crops sown and harvested by individual Indians in Birtle Agency, season of 1895.

KEE-SEE-KOO-WE-NIN'S RESERVE, No. 61.

Names of Indians.	Acres Sown.				Bushels Harvested.					Remarks.
	Wheat.	Oats.	Potatoes.	Gardens.	Wheat.	Oats.	Potatoes.	Hay—Tons.	Gardens.	
George Bone	.....	....	·75	·07	...	.....	60	80		Oats to be fed to stock in straw. The quantity approximate.
Blackbird	.....	.....	·50	·07	.....	.....	40	40	2	
Antoine Bone	.....	.....	·75	·07	.....	....	60	30	2	
William Bone	.....	20	·50	·07	.....	500	40	20	2	Garden stuff consisted of carrots and onions.
John Bone	.....	10	·75	·07	..	250	60	50	2	
David Burns	.....	....	·50	·07	.....	....	40	25	2	
George Flett	12	.....	·75	·07	300	.....	60	30	2	
Kee-See-Koo-We-nin	.....	.....	·75	·07	.....	.....	60	20	2	
Alex. Bone	....	.....	·50	·07	.....	.....	40	20	2	
Ambrose Bone	.....	.....	·25	·07	.....	.....	20	10	2	
Kee-Sha-Keesic	.....	.....	·75	·07	.....	.....	60	.....	2	
Joseph Boyer	.....	.....	·75	·07	...	....	60	50	2	
Mrs. Cook	.....	.....	·25	·07	...	.....	20	.....	2	
Total	12	30	7·75	·91	300	750	620	375	26	J. A. MARKLE, Indian Agent.

WAY-WAY-SEE-CAPPO'S RESERVE, No. 62.

As-ta-Keesic	.....	.....	·50	.....	.....	.....	40	45	.....	
Sengoose	.....	.....	·75	.....	.....	.....	60	20	.....	Wheat frozen and useless.
Way-way-see-cappo	.....	.....	·25	·13	.....	.....	20	.....	.....	
Manito-Wig-Wam	.....	.....	·50	·07	.....	.....	40	50	.....	Garden stuff used when growing.
Kee-way-tin-cappo	.....	.....	·50	·07	.....	.....	40	30	.....	
J. Andrews	5	.....	2·00	·07	.....	.....	150	90	.....	
Es-can-a-gat-egin	.....	.....	·75	.....	.....	.....	60	90	.....	
Kay-tos-Kanit	.....	.....	·25	.....	.....	.....	20	20	....	
Jim-es-can-a-gat-agin	.....	.....	·25	..	.....	.....	20	.....	.....	
John Baptiste	.....	.....	·75	·25	..	.....	60	20	.....	
Billy Long-Claws	.....	.....	1·00	·13	.....	.....	80	35	.....	
George Bird	.....	.....	·75	.. ..	.....	.....	60	35	.....	
Sandy	.....	...	·75	.. ..	.....	.. ..	60	40	.....	

John Long-Claws			50				50		
Sha-Manito-Wig-Wam			75	07			60	30	
Old Long-Claws			50	07			40		
Tawabet			25				20	50	
Wa-poos								12	
Oge-Magh			1 00				80	35	
Ka-pe-cappo								40	
Kee-we-cappo			75				60	40	
Norman Brandon			25				20	30	
John Thomas			25				20	8	
Es-can-a-gat			75				60	40	
Wa-Ka-too			50				50	10	
Pascal J. Andrew			25				25		
Charlie Wa-Ka-too								20	
Total	5		14 75	86			1195	790	

J. A. MARKLE,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Birtle Agency, season of 1895.

VALLEY RIVER RESERVE, No. 62½.

Names of Indians.	ACRES SOWN.				BUSHELS HARVESTED.					Remarks.
	Wheat.	Oats.	Potatoes	Gardens.	Wheat.	Oats.	Potatoes.	Hay—Tons.	Gardens.	
John Rattlesnake	.	.	·75	·07	.	.	60	30	10	Garden stuff consisted of onions and carrots, and they were good.
Myse-cho-che-cappo	.	.	·75	·07	.	.	60	10	10	
Wa-ta-kass	.	.	·39	·07	.	.	30	15	10	
Messequot	.	.	·39	·07	.	.	30	8	10	Oats not threshed, quantity approximate.
Hector Mentuck	.	.	·75	·07	.	.	60	10	10	
Jim Rattlesnake	.	.	·25	·07	.	.	20	12	10	
Ka-we-ta-penace	.	.	.	.	.	.	.	20	.	
Alex Ka-ka-quash	.	.	.	.	.	.	.	20	.	
Muckata-we-ass	.	.	.	.	.	.	.	8	.	
Joseph Mentuck (Band No. 61)	.	.	.	.	.	.	.	15	.	This Indian belongs to Kee-see-koo-we-nin's Band. Put in his crop on this reserve.
Total	.	.	3·28	·42	.	.	260	148	60	

GAMBLER'S RESERVE, No. 63.

Otter Skin	.	.	·25	.	.	.	20	25	.	Wheat and oats frozen ; not threshed ; quantity approximate.
John Tanner	3	4	·75	·13	45	80	60	54	2	
Total	3	4	1·00	·13	45	80	80	79	2	

J. A. MARKLE,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Birtle Agency, season of 1895.

ROLLING RIVER RESERVE, No. 67.

Names of Indians.	Acres Sown.				Bushels Delivered.					Remarks.
	Wheat.	Oats.	Potatoes.	Gardens.	Wheat.	Oats	Potatoes.	Hay—Tons.	Gardens.	
Ottakin (A Horn)			·25				20	30		Gardens consisted of onions and carrots. Several others had small patches of onions and carrots, but these were consumed when growing.
Ka-ka-ko-penace	2·50		·25	·07	40		20	30	5	
Penace			·13				10	20		
Wa-pa-cappo			·13				10			
Baptiste Dujarlais			·13	·07			10	20	5	
Paul Dujarlais			·13	·07			10	20	5	
Joseph Dujarlais			·13	·07			10	15	5	
Manito Wahina			·13				10	18		
Pa-te-quaquo-ne-ass			·25				20			
Ka-ka si-way-way-sing				·07				50	5	
Ka-kan-e-nap-enin			·25				20			
Ah-tam-as-cum-ke-wenin			·25				20			
Tepe-coo-kee-she-quape			·13				10	5		
Qui-go-e-pa-gean			·25				20			
Ka-ko-penace			·25				20	20		
Wa-poos-wean			·25				20			
Total	2·50		2·91	·35	40		230	228	25	J. A. MARKLE, Indian Agent.

Recapitulation of Crops Harvested, 1895.

CROOKED LAKE AGENCY.

Reserve No.	Band.	Farm.	Wheat.	Oats.	Potatoes.	Turnips.	Carrots.	Pease.	Onions.	Gardens.	Remarks.
71	Ochapowace	3C.	140	200	275	250	.....	.....	.....	.....	The produce of gardens was chiefly consumed during the summer, although most Indians have some carrots and onions in their cellars.
72	Kah-ke-wis-tahaw	3B.	1,330	.....	415	.....	.....	.....	.....	.....	
73	Cowesess	3A.	1,590	1,040	1,240	250	.....	.....	.....	.....	
74	Sakimay	3D.	250	200	152	25	.....	.....	.....	.....	
	Total	.....	3,310	1,440	2,082	525	.....	.....	.....	.....	

Certified correct,
A. McDonald,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Crooked Lake Agency, season of 1895.

COWESESS' RESERVE, No. 73.

Names of Indians.	ACRES SOWN.					BUSHELS HARVESTED.					Remarks.
	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	
Nepahpeness	22	8	75	13	13	350	200	75	50	.....	There was about 340 bushels of garden produce, which was mostly consumed during the summer, but most of these Indians have several bushels of carrots and onions in their cellars.
O'Soup	12	8	75	13	13	.....	250	150	50	.....	
Kanaswagnetung	6	.....	50	.....	13	.....	.....	.....	.....	.....	
Aisaican	18	.....	1 00	13	25	175	.....	150	50	.....	
Esquequanape	12	.....	75	.....	13	75	.....	100	.....	.....	
B. Henri	7	.....	75	13	13	15	.....	25	20	.....	
Zac Le Rat	9	.....	50	.....	13	.....	.....	40	.....	.....	
A. Gaddie	33	15	1 50	13	13	800	450	250	50	.....	
Wapamoose	5	.....	25	.....	.....	.....	.....	.....	.....	.....	
H. Peltier	7	.....	50	.....	13	.....	.....	30	.....	.....	
Angelique Contois	.....	.....	25	.....	.....	.....	.....	10	.....	.....	
A. Delorme	14	5	1 00	13	13	100	140	100	20	.....	
E. Peltier	8	.....	13	.....	.....	.....	.....	40	.....	.....	
M. La Vallée	4	.....	.....	.....	.....	15	.....	10	.....	.....	
A. Peltier	5	.....	50	.....	13	.....	.....	30	.....	.....	
T. Gopher	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	
Mrs. Le Rat	.....	.....	75	.....	13	.....	.....	50	.....	.....	
Pierriche Peltier	5	.....	50	.....	13	.....	.....	20	.....	.....	
F. Delorme	11	.....	50	.....	13	.....	.....	30	.....	.....	
Mrs. Ne-ka-ne-qua-nape	.....	.....	25	.....	13	.....	.....	30	.....	.....	
N. Delorme	6	.....	25	.....	.....	.....	.....	5	.....	.....	
J. B. Sparvier	.....	.....	25	.....	.....	.....	.....	30	.....	.....	J. A. SUTHERLAND, Farmer.
Wah-pe-kane-waup	6	.....	75	13	13	60	.....	65	10	.....	
Patrick Redwood	3	.....	25	.....	13	.....	.....	.....	.....	.....	
Mrs. A. O'Soup	2	.....	25	.....	.....	.....	.....	.....	.....	.....	A. MCDONALD, Indian Agent.
Ambrose Le Rat	5	.....	50	.....	13	.....	.....	.....	.....	.....	
Total	200	36	13·63	91	2·46	1,590	1,040	1,240	250	.....	

RETURN showing Crops sown and harvested by individual Indians in Crooked Lake Agency, season of 1895.

KAH-KE-WIS-TA-HAW'S RESERVE, No. 72.

Names of Indians.	ACRES SOWN.					BUSHELS HARVESTED.					Remarks.
	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	
Ka-ke-wis-ta-haw	5·00		·25			55		20			All garden produce consumed during the summer.
Wah-sa-case	9·00		·25	·13	·07	85		30			
We-na-pan	1·00		·25		·07	15		15			The majority of the wheat harvested is good.
Me-quah-quay			·13					10			
Sakamow			·13					10			
Kay-kay-cowawasis	9·00		·25			100		35			
Kah-say-way-se-mat	6·00		·25	·07	·07	120		10			
Louison	11·00		·50	·25	·07	100		40			
Me-quah-kesicawasis	4·00		·25			65		15			
Manitou-was-to-tin	10·50		·25	·13	·13	190		20			
Francis	2·00		·13	·07		35		10			
I-eke-p-wam	5·00		·25	·07	·07	50		20			
Pee coo-chese	12·00		·25		·07	85					
Jimmie	4·00		·25					15			
Nekick	4·00		·13			55		10			
Mesah-ca-ma-peness	10·00		·50	·13	·07	100		30			
Kah-pa-ma-wa-co-chin	4·50		·25			60		15			
Kah-ka-no-we-na-peu	4·00		·75			85		50			
Tay-pah-se-kay	3·00		·25			10		15			
Sagitassewenin			·25	·07	·07			10			
Tah-pow-tat	5·00		·13			70		15			
Mrs. Uwaystuck			·13					10			
J. Kah-say-way-se-mat	4·00		·25	·13		50		10			
Thos. Francis	4·00										
Total	117·00		6·03	1·05	·69	1330		415			

I. POLLOCK,
Farmer.

A. MCDONALD,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Crooked Lake Agency, season of 1895.

OCHAPOWACE'S RESERVE, No. 71.

Names of Indians.	ACRES SOWN.						BUSHELS HARVESTED.				Remarks.
	Wheat.	Oats.	Potatoes.	Turnips.	Carrots.	Gardens.	Wheat.	Oats.	Potatoes.	Turnips.	
Kah-te-kin-a-coos	.....	.....	·13	·07	.....	·07	.....	.....	10	10	Carrots and onions included in gardens.
Kee-kwa-hao-wasis	6·00	.....	·25	.....	.....	·07	30	.....	50	.....	
Kah-nah-tayo-wayo	6·00	.....	·25	·13	.....	.....	30	.....	5	10	
Kanawas-qua-hum	5·00	3·50	·65	·13	.....	·13	.....	.....	25	10	
Kesecowawasis	7·50	.....	·25	.....	.....	.....	.....	.....	10	.....	
Old Englishman	5·50	.....	·13	·07	.....	·07	.....	.....	5	5	
Pinden	.....	.....	·13	.....	.....	.....	.....	.....	15	.....	Out of the 140 bushels of wheat threshed, 50 are good.
Pierre Belanger	9·00	1·50	·65	·13	.....	·07	60	.....	5	25	
John	3·00	.....	·13	.....	.....	·07	10	.....	.....	.....	
Little Assiniboine	5·25	1·50	·39	.....	.....	·07	.....	.....	10	.....	
George	4·00	.....	·13	·07	.....	.....	.....	.....	5	.....	
Nah-na-okemah	4·00	.....	·25	·07	.....	·07	.....	.....	50	20	
Neh-he-ma-we-new	4·25	.....	·25	·07	.....	·07	.....	.....	10	10	
Kah-ah-saug-was-se-we-new	.....	.....	·13	.....	.....	.....	.....	.....	.....	.....	
Kee-say-manito-a-wasis	3·00	.....	·13	.....	.....	.....	10	.....	.....	.....	
Jacob Bear	4·50	12·00	·13	·25	·07	·07	.....	200	40	150	
Kah-soo-quay-we-new	4·50	.....	·25	·13	·07	·07	.....	.....	10	10	ISAAC POLLOCK, Farmer.
Louis Henry	4·50	.....	13	·07	.....	·07	.....	.....	25	.....	A. McDONALD, Indian Agent.
Total	76·00	18·00	4·36	1·19	·14	·90	140	200	275	250	

RETURN showing Crops sown and harvested by individual Indians in Crooked Lake Agency, season of 1895.

SAKIMAY'S RESERVE, No. 74.

Names of Indians.	Acres Sown.					Bushels Harvested.					Remarks.
	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	
Acoose	24·00	10	·50	.....	·25	250	200	25	15	.....	25 bushels turnips grown in gardens.
Kesickanecuinicoot	7·00	.....	·25	.....	·25	.....	.....	15	.....	.....	
Nowekeseswape	11·00	.....	·25	.....	·25	.....	.....	20	10	.....	
Ah-ka-ah-ka-wausa	3·00	.....	·25	.....	·25	.....	.....	15	.....	.....	
Muskaykoo	10·50	.....	·50	.....	·25	.....	.....	20	.....	.....	
Ajecoutay	7·00	.....	·25	.....	·25	.....	.....	10	.....	.....	
I-inte-cum-i-petung	5·50	.....	·25	.....	·25	.....	.....	.....	.....	.....	
Ken-nowekese-quape	7·00	.....	·25	.....	·25	.....	.....	12	.....	.....	
Ka-qua-che-cappo	6·00	.....	·25	.....	·25	.....	.....	10	.....	.....	M. CALDER, Farmer.
Young Sauteaux	.....	.....	·50	.....	.....	.....	.....	25	.....	.....	A. McDONALD, Indian Agent.
Total	81·00	10	3·25	.....	2·25	250	200	152	25	.....	

RETURN showing Crops sown and harvested by individual Indians in Moose Mountain Agency, season of 1895.

PHEASANT RUMP'S RESERVE, No. 68.

Names of Indians.	ACRES SOWN.							BUSHELS HARVESTED.						Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Corn.	Gardens.	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	Hay.	
												Bush.	Tons.	
Echwayatonka	12	....	....	·39	·25	....	·13	16	....	15	40	2·00	43	
Eahnchack		....	....	·39	·39	....	·39		....	20	75	2·00		
Washejimaije	12	....	....	·39	·39	....	·25	50	....	11	13	4 00		
Etayonappy	10	3	....	·39	·50	....	·13	60	55	12	60	7·00		
Red Thunder	9	....	....	·39	·39	....	·13	80	....	16	8	3·50	37	
Rupert	13	....	....	·39	·50	....	·13	30	....	10	19	1 50	41	
Etonshon	10	....	....	·39	·39	....	·13	45	....	14	11	2·00	15	
Jim	5	....	....	·39	·25	....	·13	45	....	10	50	2·00	10	
Bad Hand and Son (with farmer)	....	....	4	....	....	....	·13	....	10	....	....	3·00	18	
Farm	....	4	....	....	....	....	....	....	....	....	....	....	40	
Ishanskootah	....	....	....	....	....	....	....	....	....	....	....	....	18	
Little Soldier's widow	....	....	....	....	....	....	....	....	....	....	....	....	11	J. J. CAMPBELL, Indian Agent.
Total	71	7	4	3·12	3·06	....	1·55	326	65	108	276	27·00	233	

STRIPED BLANKET'S RESERVE, No. 69.

Papa	5	....	....	·25	·25	....	·13	25	....	10	50	3	27	
Old Men	10	....	....	·50	·25	....	·13	50	....	25	30	5	....	
Washtay-oakshid	22	10	....	·25	·13	....	·07	140	20	15	25	3	33	
Dick	6	....	....	·50	·13	....	·07	50	....	11	55	3½	....	
Fred	9	....	....	·50	·25	....	·07		....	23	22	5	....	
Camminie hay	10	....	....	·25	·25	....	·13	40	....	15	25	7	33	
Tokakoopi	5	....	....	·21	·25	....	·07	100	....	20	40	2	27	
Shahoakshid	5	....	....	·25	·25	....	·13		....	14	12	2½	....	
Sammy	5	....	....	·07	·25	....	·07	....	....	9	17	3½	5	
Ewack	10	....	....	·25	·25	....	·13	....	....	11	13	4½	....	
White Man	12	....	....	·25	·25	....	·07	100	....	15	25	4	33	
Farm	....	6	8	....	....	....	....	....	40	....	....	....	....	J. J. CAMPBELL, Indian Agent.
Total	99	16	8	3·28	2·51	....	1·07	505	60	168	314	43	158	

RETURN showing Crops sown and harvested by individual Indians in Moose Mountain Agency, season of 1895.

WHITE BEAR'S RESERVE, No. 70.

Names of Indians.	Acres Sown.							Bushels Harvested.						Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Corn.	Gardens.	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	Hay.	
												Bush.	Tons.	
Shahwahakoos	3·00	.....	.....	·50	·13	·13	·13	52	.....	27	35	6·00	21·50	One half acre turnips sown after 30th June.
Jack	3·00	.....	.....	·50	·13	·13	·07	60	.....	45	16	4·50	30·00	
Shewack	3·50	.....	.....	·25	·13	·13	·07	36	.....	14	12	3·00	35·00	
Sheepskin	2·50	.....	.....	·50	·75	·13	·13	41	.....	24	47	7·00	34·00	
Weechahwajin	6·00	.....	.....	1·00	·25	·13	·07	88	.....	76	15	2·00	64·00	
Ka-ka-ke-way	2·50	.....	.....	·67	·50	·50	·39	30	.....	50	100	5·00	42·00	
Shemogonish		.....	.....	·25	·13	.....	·13	15	.....	12	11	3·00	20·00	
Egg and Jimmy	2·50	.....	.....	·58	·13	·25	·13	29	.....	12	24	3·50	38·50	
John	7·00	.....	.....	1·00	·25	·13	·25	98	.....	65	42	6·00	20·00	
White Bear	.....	.....	.....	·75	·25	·25	·13	.....	.....	14	13	3·00	.....	
Jimmy	.....	.....	.....	·50	·13	.....	·13	.....	.....	18	15	3·00	.....	
Bob	.....	.....	.....	·33	·13	·13	·13	.....	.....	20	13	3·00	9·00	
Nokohoot	.....	.....	.....	·33	.....	.....	·13	.....	.....	18	.....	2·50	.....	
Big Stone	.....	.....	.....	·25	·13	·13	·07	.....	.....	10	18	1·00	.....	
William	.....	.....	.....	·25	.....	.....	·07	.....	.....	11	.....	10·00	.....	
Oldsquaws	.....	.....	.....	·25	·50	.....	·07	.....	.....	17	55	7·00	.....	J. J. CAMPBELL, Indian Agent.
Band	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Agency	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60·00	
Total	30·00	1	.....	7·91	3·54	2·04	2·10	449	.....	433	416	69·50	374·00	

RETURN showing Crops sown and harvested by individual Indians in File Hills Agency, season of 1895.

PEEPEEKESIS RESERVE, No. 81.

Names of Indians.	Acres Sown.						Bushels Harvested.						Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Hay, tons.	
Buffalo Bow	7					·50	255			66		Band.	Potatoes, turnips, carrots and onions grown in gardens. Carrots and onions eaten while green. 310 tons of hay cut and stacked for band.
Mequanis	5					·50	59			28			
Tommy	7					·50	136			37			
Young Chief Hawk	1					·50	19						
Red Bird						·25							
Keewish						·25				46			
Playing Child						·25							
Shave Tail						·25				7			
Total	20					3·00	469			184		310	A. J. McNEILL, Indian Agent.

OKANEES RESERVE, No. 82.

Moostoosekope	6	6				1·00		293		52	40	Band.	Vegetables grown in gardens. Onions and carrots eaten while green. Oats are a splendid sample. 442 tons of hay cut and stacked for the whole band.
Flag	6	5				1·00		103		9	26		
Moostahtik	5					·50				20	9		
Crow Bear	5					·50	56			25	7		
Keewaydin	6					1·00				38	36		
Squahapew	8					·50	69			47	19		
Tuckwaynow	6	5				50	26	224		29	15		
Assimawasis	8					·50	47			40			
Yellow Belly	3					·50				60	38		
Total	53	16				6·00	198	620		320	190	442	A. J. McNEILL, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in File Hills Agency, season of 1895.

STAR BLANKET'S RESERVE, No. 83.

Names of Indians.	Acres Sown.						Bushels Harvested.						Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Hay, tons.	
Ohoo	3·00	.....	.....	.....	....	·50	.....	.....	.....	20	.....	35	Turnips, carrots and onions grown in gardens and eaten by Indians during summer. Potatoes grown in gardens. Wheat cut and stacked for fodder. 155 tons of hay put up for band. A. J. McNEILL, Indian Agent.
Pimotat	1·50	.....	.....	.....	...	·50	....	.....	.....	10	....	15	
Star Blanket	2·50	.....	.....	....	.....	·50	.....	.....	.....	.....	.....	35	
Star Child	2·50	.....	.....	.....	....	·50	...	.....	.....	14	..	30	
Red Dog	·50	.....	.....	.....	.....	50	.....	.....	.....	10	.....	.....	
Powaston	1·50	.....	.....	.....	.....	·50	.....	.....	.....	12	....	40	
Total	11·50	.....	.....	.....	.....	3·00	....	..	....	66	.....	155	

BLACK BEAR'S RESERVE, No. 84.

Peekutch	8	.....	3	.....	.....	1·50	.....	.....	60	45	30	Band.	Potatoes, turnips, carrots and onions grown in gardens. Onions and carrots consumed while green. Wheat was cut and stacked and will be fed to work cattle in the straw. 487 tons of hay put up for the whole band. A. J. McNEILL, Indian Agent.
Jno. Bellgarde	10	.....	.....	.....	.....	1·50	.....	.....	.....	62	26		
Reuben	6	.....	.....	.....	.....	·75	.....	.....	.....	15	5		
Money Trail	6	.....	.....	.....	.....	1·25	....	.....	...	17	19		
Pierre	7	.....	.....	.....	...	·25	.....	.....	..	15	20		
Akapen	6	.....	.....	.....	.....	·25	....	.....	...	16	17		
Nokatorse	.....	.....	.....	.....	..	·25	.....	...	.....	10	.....		
Petwakshane	..	.....	.....	..	....	·25	.. ..	....	..	10	.....		
Total	43	.....	3	.....	.....	6·00	.....	.....	60	190	117	487	

RETURN showing Crops sown and harvested by individual Indians in Swan River Agency, season of 1895.

COTÉ RESERVE, No. 64.

Names of Indians.	Acres Sown.								Bushels Harvested.							Remarks.
	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Gardens.	Rye.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Rye.	Hay—Tons.	
A. Caldwell	1	2·00		·25	·50	·25			15	45		60	15		110	
J. Severight		3·50			·25					80		20			75	
Pete Fiddler		2·00			·25	·25		1·00		40		35	15		35	
Alex. Cook					·25	·13						45			60	
Singuish					·25	·13						40			25	
Alex. Coté					·25	·25						20			60	The grain not being threshed yet, the quantities are given approximately.
Wm. Hornie		2·00			·50	·25				45	20	45	15		90	
Bald Head		1·00			·50	·25				20	10	25			55	
White Hawk		1·00			1·00	·25				20	15	40			110	
Mrs. Pelly					·25							25			35	
J. Friday		2·00			·25	·25				30	15	25			60	
Cheatam					·25	·25						25			20	
J. Côté, chief		5·00			·50	·25				125	20	35			80	
Charles Kesick					·25		Band.					25			60	
Mooso and Ackaygun					·25							25			15	
John Singuish		1·00			·25							20			50	
Ben Côté					·25							25			65	
H. Waymes-ti-goosh					·25							20			20	
S. Manitoose		5·00	1·00		·25	·25				75	20	25	15		65	
Thomas Singuish					·25							25			60	
Ka Kaymiass			1·00		1·00	·25					20	35	15		60	
Bill Fiddler		2·00	·50		1·00	·25				40	15	45	15		65	
Iron Quill		2·50	1·00		·50	·25		·50		45	20	35	15		75	
Mrs. Favel			3·00	·25	·25	·25					65	30			65	
Chanaymenay					1·00	·25						60			20	
Bill Crow					·50							45			30	
Total	1	29·00	6·50	·50	11·00	4·01	4	1·50	15	565	220	855	105		1,465	

W. E. JONES,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Swan River Agency, season of 1895.

KEY'S RESERVE, No. 65.

Names of Indians.	Acres Sown.								Bushels Harvested.							Remarks.
	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Gardens.	Rye.	Wheat	Oats.	Barley.	Potatoes.	Turnips.	Rye.	Hay—Tons.	
Thomas Brass	....	3·00	1·50	....	·50	·25		.....	.....	75	30	40	15	.....	80	Grain not threshed; quantities given approximately.
G. Brass, sr.	.....	2·00	2·50	.....	·50	·25		.....	.....	40	40	45	15	.....	75	
W. Brass, sr	.....	4·00	1·25	.....	1·00	·25		.....	.....	65	25	60	15	.....	102	
J. Redlake	.....	2·00	1·00	.....	·50	·25		.....	.....	45	25	65	15	.....	90	
W. Brass, jr.	.....	1·50	1·00	.....	·25	.....		.....	.....	25	20	40	.....	.....	35	
Key	.....	.....	·50	.....	·25	.....	Band.	.....	.....	.....	15	25	.. ..	.....	45	
In-che-cappo	.....	.....	.....	.....	·25	.....		.....	.....	.....	.....	25	.....	.....	25	
Song-may-may-Kesic	.....	.....	.....	.....	·25	.....		.....	.....	.....	.....	20	.....	.....	30	
Ka-ka qu-one-pe	.....	.....	.....	.....	·25	.....		.....	.....	.....	.....	20	.....	.....	40	
Shoal River	.....	.....	.....	.....	2·00	.....		.....	.....	.....	.....	125	.....	.....	248	
Total	.....	12·50	7·75	.....	5·75	1·00	3	.....	.....	250	155	465	60	.....	770	

KISICKOUSE RESERVE, No. 66.

Kitchimonia	.....	8	3·00	·25	1·00	·25		.....	.....	160	60	65	20	.....	140	
Que-ne-zance	.....	7	3·00	·50	1·00	·25		1·25	.....	140	50	60	25	.....	146	
Keshane and sons	.....	2	1·50	.....	1·00	·25		1·00	.....	50	20	75	30	20	70	
Kisickouse	.....	.....	1·50	.....	·50	·25		·50	.....	.....	25	35	15	15	42	
Ka-ka-ke-may	.....	....	1·00	.....	·50	·25		·50	.. ..	.....	20	30	15	.....	75	Grain not threshed; quantities given approximately.
Waymestigoosh	.....	.....	1·00	.....	·50	·25		·50	.....	.....	25	30	.....	.....	25	
Straight Nose and Memay-qua	.....	.....	.....	.....	·50	·25		1·00	.....	.....	.....	35	.....	.....	65	
Mrs. Bird	.....	.....	·25	.....	·25	.....	Band.	.....	.....	.....	10	20	.....	.....	38	
D. Razor	.....	.....	.....	.....	·25	.....		.....	.....	.....	.....	25	.....	.....	30	
Naytamash	.....	.....	.....	.....	·25	.....		.....	.....	.....	.....	20	.....	.....	45	
T. Kennedy	.....	.....	·25	.....	·25	.....		.....	.....	....	10	25	.....	.....	25	
Mrs. Stevenson	.....	.....	.....	.....	·25	.....		.....	.....	.....	.....	25	.....	.....	30	
Mrs. Contois	.....	.....	.....	.....	·25	.....		.....	.....	.....	.....	25	.....	.....	35	
Mrs. McLeod	.....	.....	.....	.....	.....	.....		.....	.....	.....	.....	.....	.....	.....	54	
Total	.....	17	11·50	·75	6·50	1·75	·25	4·75	.....	350	220	470	105	35	820	W. E. JONES, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Muscowpetung's Agency, season of 1895.

FARM 9, PIAPOT'S RESERVE, BAND No. 75.

Names of Indians.	Acres Sown.						Bushels Harvested.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Hay—Tons.	
Lame Fox	9·00				·25		60			24	30		Cut by the Band.	Grain not threshed. Approximate estimate.
Chas. Fox		3		50				104		18				
Thunder Child														
Muskeg	5·00			25			60			20				
Tee-pee-skotch					25						25			
Two Horns	9·00						120			31	20			
A. Rock										10	25			
Rock Thunder				1·00	1·00					25	30			
George Gopher										20	10			
We-hear-him-Calling	4·50						40			12	25			
Young Head-Man	6·00		1	25	·50		75		30	19	40			
Wolverine														
Iah-say-Watum	6·00			25	·25		25			30	15			
Little Shoe	4·00			25			80			15				
White Star	7·00			25	·25	13	130			25	27	4		
Dead Body														
Rock Chief	4·50			13		·25	62			13		7		
Watatep	4·00			13	·25	13	75			18	24	5		
White Eagle	2·50				·50		25			15	50			
Kanouse				25						8	10			
Moose Thunder											12			
Chee-Chuse											15			
Kah-pay-tay-Kah-See											25			
Bear Speaker	3·00			25			60			25	25			
Nacot														
Carrier	5·00		2	25	·25		100		50	30	35			
Nee-poo-we-nin														
Masquah	6·00			25			40			30				
Sitting Back														
Thunder	5.00			25			75			25				
Ka-na-too-ca-wat														J. H. GOODERHAM, Farmer.
Carried forward	80·50	3	3	4·26	3·50	·51	1027	104	80	413	443	16		

RETURN showing Crops sown and harvested by individual Indians in Muscowpetung's Agency, season of 1895.

FARM 9, PIAPOT'S RESERVE, BAND No. 75—*Continued.*

Names of Indians.	ACRES SOWN.						BUSHELS HARVESTED.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Hay—Tons.	
Brought forward	80·50	3	3	4·26	3·50	·51	1027	104	80	413	443	16		
Chief Piapot and son Haul-him-along Oke-we-how Two Hearts Big Sky and son Day Buffalo	3·50 .... 6·00 ...	... .	.... 1	·50 .... ·25	·50	·50	10 .... 100	.... 12 ...	.... 18	40	150	25		
Total	90·00	3	4	5·01	4·00	1·01	1137	104	92	471	593	41	900	J. H. GOODERHAM, Farme
Home Farm No. 9	.....	3	4	.....	·25	.....	.....	100	95	55	.....	.....	20	J. B. LASH, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Muscowpetung's Agency, season of 1895.

MUSCOWPETUNG'S RESERVE, No. 80, (Farm 4-B).

Names of Indians.	ACRES SOWN.						BUSHELS HARVESTED.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Hay—Tons.	
Muscowpetung	.....	.....	.....	.....	1·00	.....	.....	.....	.....	.....	10	.....	.....	Grain approximately estimated; not threshed.
Thunder	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	
Muscowcappo	7	.....	...	.....	·50	·50	140	.....	.....	20	70	5	.....	
Echewas	4	.....	.....	.....	.....	.....	50	.....	.....	20	.....	.....	.....	Onions very small yield, and eaten during season.
Apiskenew	4	.....	...	1·00	.....	.....	60	.....	.....	20	.....	.....	.....	
Fiddler	4	.....	.....	.....	·50	·50	80	.....	.....	20	20	3	.....	
Gambler	4	.....	.....	.....	.....	.....	60	.....	.....	20	.....	...	.....	
Manitoowasis	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	
James Keepeness	3	.....	.....	.....	1·00	.....	50	.....	.....	25	50	.....	.....	
Duncan	3	.....	.....	.....	.....	.....	30	.....	.....	15	.....	.....	.....	
Naokatepeness	1	.....	.....	2·00	.....	.....	10	.....	.....	15	.....	.....	.....	
Stone Bear	3	.....	.....	.....	.....	.....	35	.....	.....	15	.....	.....	.....	
Kakepeness	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	
Takawash	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	.....	.....	
Bowlegs	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	
Mrs. Keesick	.....	.....	.....	1·00	.....	.....	.....	.....	.....	25	.....	.....	.....	
Mrs. Ankusk	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	
Anakwad	9	.....	.....	1·00	.....	.....	125	.....	.....	70	.....	.....	.....	
Band No. 80	.....	.....	.....	.....	.....	.....	.....	..	.....	.....	.....	.....	515	J. NICOL, Farmer.
Total	42	.....	.....	5·00	3·00	1·00	640	..	.....	380	160	8	515	
Home Farm, 4-B	.....	5	6	·50	.....	·50	.....	125	100	35	.....	6	20	J. B. LASH, Indian Agent.

RETURN showing Crops sown and harvested by Farmer in Muscowpetung's Agency, season of 1895.

FARM No. 4*a*. PASQUAH'S RESERVE, No. 79.

Name of Farmer.	ACRES SOWN.						BUSHELS HARVESTED.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Hay—Tons.	Gardens.	
S. Hockley, Home Farm No. 4*a*	.....	6	6	.50	·25	·25	.....	210	200	30	40	14	20	S. HOCKLEY, Farmer. J. B. LASH, Indian Agent.

PASQUAH'S RESERVE, No. 79.

Gotoess	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
James Lamack	12	.....	.....	·50	·13	.....	259	.....	.....	20	10			
Geordy Thorn	5	.....	.....	·25	·13	·25	117	.....	.....	15	10			
Netowsquitawa	3	.....	.....	.....	.....	.....	30	.....	.....	.....	.....			
Wm. Dubois	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
Tom Horsefall	4	.....	.....	·39	·13	.....	86	.....	.....	20	12			
Nonchanguoss	6	.....	.....	·25	.....	.....	99	.....	.....	20	.....			
Ant. Cyr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
George Asham	13	.....	.....	·50	·13	·50	185	.....	.....	30	15			
Tom. Stevenson	15	6	3	·50	·13	·50	463	428	250	40	10			
Pachapace	.....	.....	.....	·25	.....	·13	.....	.....	.....	16	.....			
Echawascomequapoo	.....	.....	.....	·25	·13	.....	.....	.....	.....	16	.....			
Ka-ka-keesic	.....	.....	.....	·25	.....	.....	.....	.....	.....	10	.....			
Albert Asham	.....	.....	.....	·25	.....	.....	.....	.....	.....	15	.....			
John Asham, jr	.....	.....	.....	·25	.....	.....	.....	.....	.....	15	.....			
Joe Faurnie	.....	.....	.....	·13	·13	.....	.....	.....	.....	10	.....			
Big Margaret	.....	.....	.....	·13	.....	.....	.....	.....	.....	8	.....			
Peter Dubois	.....	.....	.....	·13	.....	.....	.....	.....	.....	8	.....			
Alex. Matoney	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
Francis Matoney	12	1	.....	·50	·13	·13	125	16	.....	25	10			
Total	70	7	3	4·53	1·04	1.51	1364	444	250	268	67	340	70	S. HOCKLEY, Farmer. J. B. LASH, Indian Agent.

Cut by the band.

Eaten by Indians during summer.

RETURN showing Crops sown and harvested by individual Indians in Muscowpetung's Agency, season of 1895.

STANDING BUFFALO'S RESERVE, No. 78.

Names of Indians.	ACRES SOWN.						BUSHELS HARVESTED.							Remarks.
	Wheat.	Oats.	Potatoes.	Turnips.	Gardens.	Corn.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Corn.	Gardens.	
Standing Buffalo	2	.....	·50	.....	·13	·25	30	....	.....	60	.....	frozen	Eaten by Indians during summer.	
Mowdee														
We-an-a-tappe	5	....	·50	.....	·13	·13	100	.....	.....	75	.....	"		
Mapewasta	.....	.....	·50	·13	....	·25	.....	.....	.....	40	15	"		
Weycanewhaw	.....	.....	·25	·13	.....	·25	.....	.....	.....	35	10	"		
Frank	.....	.....	.....	1·00	.....	.....	.....	.....	.....	.....	75	"		
Wazoata	.....	.....	·25	.....	.....	·13	.....	.....	.....	30	...	"		
Humpa-nishedoka	2	.....	·75	.....	.....	·25	30	.....	.....	110	....	"		
Chunta														
Matokeppe	3	.....	·25	.....	.....	·13	frozen	.....	.....	50	...	"		
Moses	5	.....	·13	.....	·13	·13	75	.....	.....	35	...	4		
Wazonka	5	.....	·13	.....	.....	·13	75	.....	.....	15	.....	5		
Shundoseeche	....	.....	·13	.....	.....	·25	.....	.....	.....	15	.....	6		
Nehepshaw	....	.....	·13	.....	.....	·13	.....	.....	.....	15	.....	frozen		
Radanna	.....	.....	·13	.....	.....	·13	.....	.....	.....	20	.....	6		Grain not threshed yet.
Towacca	5	1	·13	.....	·13	·13	75	30	....	30	.....	6		Approximate estimate.
Tom and Hoodota	3	.....	·13	.....	·25	·13	frozen	.....	.....	50	.....	4		
Laswiss	5	.....	·25	·25	.....	25	"	.....	.....	60	20	6		
Chau-haw	.....	.....	·13	.....	.....	·13	.....	.....	.....	15	.....	frozen		
Patreep	5	1	·75	.50	·25	·25	100	20	.....	100	50	"		
Wasinna	2	.....	·50	.....	.....	.....	30	.....	.....	.....	.....	.....		
Total	42	2	5·54	2.01	1·02	3·05	515	50		755	170	37	50	

S. HOCKLEY,
Farmer.

J. B. LASH,
Indian Agent.

Return showing Crops sown and harvested by individual Indians in Assiniboine Agency, season of 1895.

CARRY KETTLE'S RESERVE, No. 76.

Names of Indians.	Acres Sown.							Bushels Harvested.							Remarks.
	Wheat.	Oats.	Potatoes.	Turnips.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Potatoes.	Turnips.	Carrots.	Onions.	Hay—Tons.	
Gee-gus	14		50	25	13	13	25	200		41	43	4	5	38	Gardens consumed during summer and fall.
Dry Walker			50	25	13		25			38	34	4		36	
Carry Kettle	8		50	25	13	13	25	100		42	37	5	6	34	
Joe Stone	4		25	25	13	13	25	50		21	36	6	6	10	Grain not being threshed is given approximately.
Black Foot				25							40				
Hi-way-he	7		50	25	13		25	90		39	40	4		11	
Big Darkness	12		50	25	13	13	25	170		43	35	4	7	40	
Artist			25	25	13		25			22	32	4			
Dragon Fly	8		25	25	13	13	25	140		20	34	5	4	25	
Wes-e-can	10		50	25	13	13	25	140		46	33	6	6	38	
Broken Eye				25							31				
Runs-with-another			25							19					
Walks by River				25							32				
Pretty Shield	8		50	25	13	13		90		36	32	5	6	12	
E-chas-ho-pah	10		50	25	13	13	25	130		42	36	6	5	10	
Ho-po-kie	12		50	25	13	13	25	160		43	39	7	5	12	
Rabbit Skin	8		50	25	13	13	25	70		41	34	7	6	25	
White Walker			25				25			22				10	
White Face	10		25	25	13		25	120		18	35	8		10	
Red Eagle	15		50	25	13	13	25	200		40	32	8	6	40	
A-cha-za				25							36				
Charlie Rider	7	15	50	25	13	13	25	110	300	40	31	6	7	11	
Little Mountain				25							32				
Crooked Arm			50	25	13		25			43	33	8		38	
Winter Bird			25	25	13					19	33	7			
Dog Skin			25							20					
White Cap				25							31				
Richard			25	25						22	40				
Moon Face	8		50	25	13	13	25	120		46	40	7	5	45	
Two Bears			25	25						24	36				
Crooked Legs	6		50	25	13	13	25	80		44	34	7	6	30	
E-ash-abbe	5		25	25			25	75		21	31			10	
Oak-shippie	10		50	25	13		25	80		43	31	8		10	

Chaw-o-gath			25	25						19	32				
Stands-in-Water			25	25						21	34				
Nest Bird			25	25						23	33			10	
Eagle Man			25	25						21	31			10	
Cut Nose	7		25	25	13		25	60		24	32	6		10	
We-oak-shin			50	25			25			41	30				
O-to-mony				25							30				
Runner			50	25	13	13	25			41	30	8	5	25	
Frank			25	25						18	30				
Black Mane			25	25			25			18	32			10	
Liar			25	25			25			19	31				
E-ah-sich			50	25						40	36			10	
Pretty Bear	12		50	50	13	13	25	140		40	31	10	6	40	
Rattle Snake			25	25						22	30				
The Turtle			25	25			25			18	30				
Old Widows			4.75	3·50						310	360				
Agency														40	
Total	181	15	20·00	15·00	3·12	2·08	7·00	2325	300	1570	1875	150	91	650	

JAS. C. HALFORD,
Farmer

W. S. GRANT,
Indian Agent.

Return showing Crops sown and harvested by individual Indians in Touchwood Hills Agency, season of 1895.

FARM 6a, POOR MAN'S RESERVE, No. 88.

Names of Indians.	Acres Sown.								Bushels Harvested.								Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay, tons.	
C. Favel, junior				1·00	50			·25		70		55	40	9	6·00	40	The Indians have been using vegetables from their gardens since latter end of July.
Young Chief		7·50		2·50	·75			·50	80			130	75	16	9.00	31	
Worm and sons	6			1·50	·75			·25	120			78	45	11	4.00	55	
Fox and son	10			1·00	·25			·25				48	30	7	6·00	35	
W. Favel				2·00	·50			·25		30		95	35	6	5·00	95	
Machigwoness and family	12	6·00		·50				·25				27		7	3·00	55	
Stone				·75	·25			·50				46	42	14	11·00	6	
Tobacco				·50	·25			·25				23	20	8	2·00	24	
Widow Mary's son				·50	·25			·25				35	23	5	4·00	15	
Mahpootikan	8			·25	·25							18	28			25	Mahpootikan's wheat cut for feed 18 loads.
Widow Qui Chisk				·25	·25			·13				24	22	4	2·50		
Widow Taclucoke				·25								16					
Ronak				·50	·25			·13				32	18	6	3·00		John P. Wright, Indian Agent.
Keahkewaypen				·50	·25			·25				24	16	9	5·00	22	Edward Stanley, Farmer.
Ewimie																	
Total	36	13·50		12·00	4·50			3·26	200	100		651	394	102	60·50	403	

RETURN showing Crops sown and harvested by individual Indians in Touchwood Hills Agency, season of 1895.

FARM 6*a*, DAY STAR'S RESERVE, No. 87.

Names of Indians.	ACRES SOWN.								BUSHELS HARVESTED.								Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay, tons.	
P. Buffalo	.....	.....	.....	1·50	·50	.....	·13	.....	.....	.....	.....	38	29	1½	·50	63	The Indians have been using more or less vegetables since they were eatable.
Keewistootin	.....	.....	.....	1·00	·25	.....	·13	.....	.....	.....	.....	32	18	2	·25	24	
Machechuck and Mehingin.	.....	.....	.....	1·50	·50	.....	·50	.....	.....	.....	.....	45	34	5	·50	115	
Kinequon	.....	.....	.....	1·25	·50	.....	·25	.....	.....	.....	.....	28	23	3⅓	·50	50	
Mootie	.....	.....	.....	1·00	·50	.....	·25	.....	.....	.....	.....	44	36	2½	·25	45	
Ittitahkoose	.....	.....	.....	1·00	·50	.....	·13	.....	.....	.....	.....	26	39	2	·75	74	
Crow Buffalo	.....	.....	.....	·75	·25	.....	·13	.....	.....	.....	.....	37	17	1½	·25	26	
Moostoose	.....	.....	.....	·75	·25	.....	·13	.....	.....	.....	.....	25	15	1	·25	42	
Mahpaysis	.....	.....	.....	1·00	·25	.....	·25	.....	.....	.....	.....	41	24	3	·75	24	
Mrs. Day Star	.....	.....	.....	·25	·25	.....	·13	.....	.....	.....	.....	16	19	1½	·50	.....	
Old Mrs. Mootie	.....	.....	.....	·25	·13	.....	·13	.....	.....	.....	.....	12	11	2	·25	.....	
Fine Mud	.....	.....	.....	·50	·13	.....	·13	.....	.....	.....	.....	24	7	1½	·25	.....	
Joe Tahpayswaytum	.....	.....	.....	·50	·25	.....	·13	.....	.....	.....	.....	29	21	1½	·25	25	
John Kinequon	.....	.....	.....	·50	·25	.....	·13	.....	.....	.....	.....	21	18	1	·50	20	
Widow Keewaytin	.....	.....	.....	·25	·13	.....	·13	.....	.....	.....	.....	13	13	2	·25	.....	
T. Moosomay	.....	.....	.....	·50	·25	.....	·25	.....	.....	.....	.....	23	26	4	·75	36	JOHN P. WRIGHT, Indian Agent.
Wanapayah	.....	.....	.....	·50	·13	.....	·13	.....	.....	.....	.....	29	17	1½	·25	.....	EDWARD STANLEY, Farmer.
Total	.....	.....	.....	13·00	5·02	.....	3·06	.....	.....	.....	.....	483	367	37	7·00	544	

Return showing Crops sown and harvested by individual Indians in Touchwood Hills Agency, season of 1895.

GEORGE GORDON'S RESERVE, No. 86.

Names of Indians.	Acres Sown.								Bushels Harvested.								Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay, tons.	
Kissipiass and son	.....	.....	.....	·50	Turnips, carrots and onions sown together and divided afterwards.		.....	.....	.....	.....	.....	50	30	10	6	25	
Anderson family	12·00	2	.....	·50			.....	.....	.....	.....	.....	42	.....	.....	2	100	
Ahtouse	.....	.....	.....	·25			.....	.....	.....	.....	.....	15	.....	.....	.....	.....	
Josiah Pratt	3·00	.....	.....	·75			.....	.....	60	.....	.....	80	10	7	1	80	Two acres cut.
F. Seer	.....	4	.....	·50			.....	.....	.....	150	.....	30	.....	.....	.....	30	Oats fair crop.
Tom McNab	7·50	.....	.....	·75			.....	.....	.....	.....	.....	100	30	15	10	75	
John Cochrane	.....	.....	.....	·50			.....	.....	.....	.....	.....	35	40	18	13	37	Good crop of roots.
C. Pratt and Iron Quill	3·00	3	.....	·50			.....	.....	60	100	.....	50	.....	5	.....	.....	
Aleck McNab	4·00	2	.....	·50			.....	.....	.....	50	.....	40	20	13	3	90	Oats fair.
Alfred McNab	7·00	3	.....	·50			.....	.....	.....	80	.....	30	.....	.....	.....	50	"
John Seer	5·00	.....	.....	·50			.....	.....	20	.....	.....	48	14	16	.....	30	Only one acre of wheat cut.
Gordon family	.....	.....	.....	·50			.....	.....	.....	.....	.....	30	20	10	3	75	
White Bear	6·00	.....	.....	·50			.....	.....	40	.....	.....	70	14	13	11	28	Two acres of wheat cut.
Bittern Nose	.....	.....	.....	·25			.....	.....	.....	.....	.....	18	13	19	1	75	
Fisher and son	4·00	.....	.....	·50	.....	.....	.....	.....	.....	.....	.....	30	11	18	1	.....	
Day Bird	3·00	2	.....	·25	.....	.....	.....	.....	.....	75	.....	19	10	12	2	.....	Oats good.
Hy. Bird	4·50	1	.....	·25	.....	.....	.....	.....	.....	40	.....	17	.....	.....	.....	100	"
Band	.....	.....	.....	.....	1·50	1·50	·50	.....	.....	.....	.....	.....	.....	.....	.....	.....	JOHN P. WRIGHT, Indian Agent.
Total	59·00	17	.....	8·00	1·50	1·50	·50	.....	180	495	.....	704	212	156	53	795	THO. E. BAKER, Farmer.

RETURN showing Crops sown and harvested by individual Indians in Touchwood Hills Agency, season of 1895.

MUSCOWEQUAN'S RESERVE, No. 85.

Names of Indians.	ACRES SOWN.								BUSHELS HARVESTED.								Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay, tons.	
John Desjarlais	.....	.....	.....	·50	1·00	·25	·13	.....	.....	.....	.....	5	10	10	.....	12	
Henry Bear	.....	13·00	4	·75	·50	·25	·13	.....	.....	700	75	15	25	2	.....	50	
Windegoquiass	2	2·00	.....	·75	·25	·13	·07	.....	6	30	.....	5	10	2	.....	50	
Chief Muscowequan	.....	4·00	.....	·75	·25	·13	·07	.....	.....	30	.....	5	5	2	.....	40	
Moïse and Blind Man	2	3·00	1	·00	·25	·25	·07	.....	.....	30	10	5	10	3	.....	40	
Jos. Muscowequan	.....	2·00	.....	·50	·25	·13	·07	.....	.....	20	.....	2	5	1	.....	20	
Ap-it-osa-mona	.....	4·00	.....	·50	·25	·13	·07	.....	.....	30	.....	5	10	2	.....	45	
Pierre Desjarlais	.....	4·00	.....	·50	·25	·13	·07	.....	.....	50	.....	5	25	5	.....	50	
Ma-hin-ga-neas	.....	2·50	.....	·75	·50	·13	·07	.....	.....	20	.....	7	20	4	.....	60	
Old Hunter	.....	.....	.....	·50	.....	.....	·07	.....	.....	.....	.....	3	5	.....	.....	.....	
Fire Flames	.....	.....	.....	·50	·25	·13	·07	.....	.....	.....	.....	5	5	3	.....	.....	
Mamaquay	.....	.....	.....	·50	.....	·13	·07	.....	.....	.....	.....	3	.....	2	.....	.....	
Souarnox	.....	.....	.....	·50	.....	·13	·07	.....	.....	.....	.....	2	.....	2	.....	.....	JOHN P. WRIGHT, Indian Agent.
Mrs. Green	.....	.....	.....	·50	·25	·13	·07	.....	.....	.....	.....	5	5	1	.....	25	W. M. LAMBERT, Farmer.
Total	4	34·50	5	8·50	4·00	2·05	1·10	.....	6	910	85	72	135	39	.....	392	

RETURN showing Crops sown and harvested by individual Indians in Saddle Lake Agency, season of 1895.

BLUE QUILL'S RESERVE, No. 127.

Names of Indians.	ACRES SOWN.							BUSHELS HARVESTED.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Carrots.	Onions.	Hay—Tons.	
Blue Quill, Headman	.....	.....	3·00	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	20	Rain fell on this reserve in July, and the crop is better than at Saddle Lake.
Albert Paul	.....	.....	2·00	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	13	
Kahkeesim	.....	.....	3·00	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	20	
Alexis	.....	.....	2·00	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	15	
Peepeekeesis	2	.....	2·00	·25	.....	.....	.....	10	.....	5	20	.....	.....	55	
Oskineek	1	.....	2·00	.....	.....	.....	.....	6	.....	8	.....	.....	.....	12	
Red Crow	2	.....	4·00	·17	.....	.....	.....	8	.....	15	6	.....	.....	63	
Jos. Wahpawaise	3	.....	2·50	·17	.....	.....	.....	6	.....	18	5	.....	.....	33	
Mooswah	3	.....	3·00	·25	.....	.....	.....	8	.....	6	27	.....	.....	52	
Puskwack	.....	.....	3·00	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	63	
P. Bright-eyes	.....	.....	4·00	.....	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	
L. Doghead	2	.....	3·00	.....	.....	.....	.....	5	.....	10	.....	.....	.....	25	
J. B. Doghead	.....	.....	1·50	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	36	
John Lepotack	2	.....	1·50	.....	.....	.....	.....	5	.....	6	.....	.....	.....	15	
Wah-pee-in-ew and sons	2	.....	2·50	·17	.....	.....	.....	8	.....	10	8	.....	.....	63	
Horse-Thief	.....	.....	2·00	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	15	
Benjamin Quinn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Band	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	29	17	.....	
Total	17	.....	41·00	1·01	1	1	.....	56	.....	128	66	29	17	500	JOHN ROSS, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Saddle Lake Agency, season of 1895.

SADDLE LAKE RESERVE, No. 125.

Names of Indians.	ACRES SOWN.							BUSHELS HARVESTED.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Carrots.	Onions.	Hay—Tons.	
Job Lepotack	6·00	.....	10·00	·17	.....	.....	.....	12	.. .	24	.....	.....	....	96	
Little Crane	2·50	.....	5·00	·17	.....	.....	.....	6	.....	12	.....	.....	.....	78	
Mr. John	2·00	.....	3·50	·17	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	
David Makookis	1·00	.....	3·00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	
Louis	4·00	.....	2·00	·50	.....	.....	.....	20	.....	.....	39	.....	.....	54	
Oseemeemas	4·00	.....	3·00	·17	.....	.....	.....	12	.....	.....	.....	.....	.....	46	
John Makookis	.....	.....	3·00	·25	.....	.....	.....	.....	.....	15	10	.....	.....	15	
Moses	5·00	.....	3·50	·17	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	
Thos. Hunter and son-in-law	13·50	.....	11·00	·25	.....	.....	.....	12	.....	.....	30	.....	.....	125	
Augustine Steinhauer	.....	.....	.....	·17	.....	.....	.....	.....	.....	.....	.....	.....	.....	175	
Samuel Steinhauer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	Grain put in at Whitefish Lake Reserve.
Band	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	32	12	.....	JOHN ROSS, Indian Agent.
Total	38·00	.....	44·00	2·02	1	1	.....	62	.....	51	79	32	12	757	

RETURN showing Crops sown and harvested by individual Indians in Saddle Lake Agency, season of 1895.

JAMES SEENUM'S RESERVE, No. 128.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.							Bushels Harvested.							Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Carrots.	Onions.	Hay—Tons.	
12	Peter Apow	5·00	.....	.....	·34	.....	.....	.....	15	.....	.....	10	.....	.....	.....	
1	Pekan and sons	6·50	.....	5·00	·34	.....	.....	.....	10	.....	10	10	.....	.....	.....	
133	Jacob Bull	2·00	.....	3·00	.....	.....	.....	.....	*	.....	.....	.....	.....	.....	.....	*Cut for hay.
101	Elias Jackson	4·00	.....	4·00	·34	.....	.....	.....	10	.....	.....	10	.....	.....	.....	
9	David Seenum	2·00	.....	3·00	·34	.....	.....	.....	10	.....	.....	5	.....	.....	.....	
106	Joe Makookis	4·00	.....	.....	·34	.....	.....	.....	20	.....	.....	5	.....	.....	.....	
8	Thomas Sinclair	4·00	.....	.....	·34	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	
117	John Bull	4·50	.....	.....	·68	.....	.....	.....	20	.....	.....	12	.....	.....	.....	
42	Jacob Hairline	2·00	.....	.....	.....	.....	.....	.....	†	.....	.....	.....	.....	.....	.....	†Total failure.
32	Arthur Steinhaur	33·00	5	.....	3·34	.....	.....	.....	80	30	.....	50	.....	.....	.....	
41	Sam Steinhauer	7·00	.....	2.50	1·00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
52	Peter Blood	3·00	.....	3.50	.....	.....	.....	.....	4	.....	4	.....	.....	.....	.....	
55	Mrs. Wm. Baldhead	2·00	.....	.....	·11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
79	Kwee Kis	4·50	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	
18	John Half, jun	4·00	.....	2·00	.....	.....	.....	.....	10	.....	20	.....	.....	.....	.....	
51	Achip Half	2·00	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	
35	John White	2·00	.....	3·00	.....	.....	.....	.....	10	.....	10	.....	.....	.....	.....	One acre grain stuffs sown by band was consumed during summer by Indians.
75	Ahkumusinese	1·00	.....	1·00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
114	Alexis	1·00	.....	4·00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
78	Peter Breast	3·00	.....	2·00	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	
65	Erastus	2·00	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	The most of the amounts herein shown are only estimated, as some of the grain is not yet threshed.
136	Jonas Rose	4·00	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	
72	Albert Cardinal	2·00	.....	.....	·11	.....	.....	.....	8	.....	.....	10	.....	.....	.....	
82	Baptiste Cardinal	5·50	.....	2·00	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	
127	H. Cardinal	1·50	.....	.....	·22	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	
13	E. Wood	4·00	.....	6·00	·68	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	
123	A. Gaint	2·00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
47	Peter Shirt, Headman	5·00	.....	2·50	.....	.....	.....	.....	10	.....	10	.....	.....	.....	.....	
74	John Whiteford	1·50	.....	2·50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
24	Moïse Jackson	5·50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
135	Sam Bull	2·00	.....	.....	·22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
99	Mathew Houle	4·00	.....	.....	·50	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	
40	John Sinclair	1·50	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	

39	Nathaniel Leg	3·00			·50								2			
21	John Hunter, Headman	3·00							15							
58	Wm. Stamp	3·00		3·00												
22	John Hunter, jun	3·00		2·50					10							
61	E. Kinnowin	3·00														
130	John Baptiste	1·50														
15	Sam Saulteaux	3·50		2·00					6							
63	Tanny Bald Head	2·50														
57	R. Hardisty	2·00		2·50												
38	E. Houle	1·00														
115	Kah Kwaynum	1·00														
100	Paysis	1·00		1·00												
121	John Sunday	1·00														
48	Thos. Jackson and Son	3·50							7							
107	Moses Jackson	2·00							10							
2	Jacob Jackson	4·00			·34											
16	Paul Beryard	5·00		3·00	·34				10		4	6				P. TOMKINS, Farmer
	Band					1	1	1					20	13	1100	
	Total	180·00	5	60·00	10·08	1	1	1	324	30	58	149	20	13	1100	JOHN ROSS, Indian Agent.

Return showing Crops sown and harvested by individual Indians in Edmonton Agency, season of 1895.

ENOCH'S RESERVE, No. 135.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.						Bushels Harvested.						Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	
98	Gordon	6	.....	.....	.....	13	21	50	.....	.....	.....	5	30	
26	Alexander	8	2	4	50	13	21	24	67	20	70	8	26	
128	Jos. Lalouise	4	.....	.....	13	07	39	16	.....	.....	25	2	35	
126	Tom Stony	4	.....	1	50	21	21	12	.....	10	30	9	20	
114	Jas. Stony	5	.....	2	...	25	21	20	.....	12	.....	16	25	
40	Mr. Jim	3	.....	2	13	13	21	21	.....	10	10	4	26	
68	Daniel	8	4	6	2·25	21	75	80	100	85	200	8	150	
11	Lazarus	6	3	4	25	21	13	40	37	.....	25	12	15	
4	Wm. Ward	8	6	6	50	13	25	100	135	50	50	4	20	
143	Felix Lalouise	.....	.....	.....	.....	13	25	.....	.....	.....	.....	4	10	
77	Tom Saulteau	4	..	.....	13	21	25	.....	.....	.....	10	12	10	
89	Little Antoine	5	2	2	13	13	25	30	.....	9	25	8	50	
16	A. Bighead	4	2	..	25	21	25	50	25	.....	30	10	40	
138	Alexis Charlo	4	2	....	13	13	21	23	.....	.....	25	4	30	
82	Joseph	4	...	3	25	07	25	35	.....	20	50	3	40	
61	B. Shortlegs	4	3	3	13	13	25	30	20	25	25	5	20	
41	Charlo	6	4	3	25	07	25	71	56	14	75	2	15	
30	Grasshopper	.....	.....	.....	13	13	21	.	...	.....	25	3	8	
7	Louis Ward	.....	.....	.....	25	13	21	.....	.....	.....	30	4	10	
37	Long Tom	.....	.....	.....	.....	21	13	.....	...	...	.....	4	10	
80	Felix	5	2	3	13	21	13	40	3	.....	25	3	10	
	Total	88	30	39	6·04	3·23	5·21	642	443	255	730	130	600	Ch. de Cazes, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Edmonton Agency, season of 1895.

MICHEL'S RESERVE, No. 135.

Nos. of Pay Tickets.	Names of Indians.	ACRES SOWN.						BUSHELS HARVESTED.						Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	
1	Michel Callihoo	.....	15	6	·75	·75	·50	.....	180	100	100	30	50	Gardens include carrots, onions, beets, beans, cabbage, tobacco, etc.
5	Gladu	15	12	4	·50	·50	·25	100	100	50	80	24	30	
22	B. Callihoo	.....	.....	.....	·50	·25	·13	.....	.....	.....	70	16	20	
25	Louis Callihoo	10	10	6	·75	·75	·50	80	160	100	110	36	46	
27	Pierre Valade	4	.....	5	·50	·25	·13	40	.....	60	50	14	20	
67	Albert	5	3	4	·50	·25	·25	30	40	50	50	18	44	
76	Timothy	8	.....	.....	·50	·25	·25	45	.....	.....	40	12	44	
	Total	42	40	25	4·00	3·00	2·01	295	480	360	500	150	254	CH. DE CAZES, Indian Agent.

Return showing Crops sown and harvested by individual Indians in Edmonton Agency, season of 1895.

ALEXANDER'S RESERVE, No. 134.

Names of Indians.	Acres Sown.						Bushels Harvested.						Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	
Manatowais	2	.....	2	13	.....	13	20	.....	15	20	.....	10	
Narbort	8	.....	.....	25	.....	13	80	.....	.....	40	.....	10	
Alexander	12	2	4	50	.....	13	40	25	30	100	.....	10	
Jacob	1	1	.....	13	.....	13	8	10	.....	10	.....	5	
Philip	3	.....	.....	13	.....	13	40	.....	.....	15	.....	5	
John	.....	.....	3	13	.....	13	.....	.....	40	15	.....	5	
John (Headman)	.....	.....	3	25	.....	13	.....	.....	30	40	.....	15	
Joseph	8	.....	4	25	.....	13	80	.....	40	60	.....	25	
Isaac	4	.....	4	13	.....	13	.....	.....	10	25	.....	10	
Thomosis	4	4	2	13	.....	13	40	60	20	15	.....	10	
Edward	6	.....	4	13	.....	13	60	.....	40	15	.....	10	
Narbort	4	.....	2	13	.....	13	.....	.....	.....	10	.....	10	
Michelis	4	.....	4	13	.....	13	30	.....	25	15	.....	10	
Paul	2	.....	2	13	.....	13	.....	.....	.....	15	.....	5	
Nancy	2	.....	2	13	.....	13	.....	.....	.....	30	.....	10	
Asawanaskeo	2	.....	2	13	.....	13	.....	.....	.....	40	.....	15	
Pierre	4	.....	2	13	.....	13	.....	.....	.....	60	.....	10	
John Left Handed	2	.....	2	13	.....	13	20	.....	30	30	.....	10	
Cannamacheo	.....	.....	2	13	.....	13	.....	.....	20	20	.....	15	
François	4	.....	2	13	.....	13	20	.....	30	15	.....	10	
Thomas	5	2	2	13	.....	13	50	30	20	50	.....	15	
John	3	2	3	13	.....	13	.....	30	10	10	.....	10	
Baptiste Wolf	.....	.....	8	13	.....	13	.....	.....	80	10	.....	10	
Thomo	3	.....	2	13	.....	13	8	.....	12	35	.....	15	
Abraham	3	.....	.....	13	.....	13	8	.....	.....	10	.....	10	
Antoine	5	.....	1	13	.....	13	22	.....	10	40	.....	15	
Pischaskoos	1	.....	1	25	.....	25	10	.....	10	30	.....	5	
Beaver Foot	12	2	8	50	.....	13	80	40	60	150	.....	200	
Henry	1	1	1	13	.....	13	10	15	.....	50	.....	60	
Baptiste	3	.....	.....	13	.....	13	30	.....	10	100	.....	250	
Peter	.....	.....	4	13	.....	13	.....	.....	40	100	.....	200	
Samuel	2	.....	3	13	.....	.....	.....	.....	.....	125	.....	.....	W. J. O'Donnell, Farmer.
Moïse	3	2	1	75	.....	.....	30	20	10	100	.....	.....	Ch. de Cazes, Indian Agent.
Total	113	16	80	6·13	.....	4·15	686	230	592	1,400	.....	1,000	

Return showing Crops sown and harvested by individual Indians in Edmonton Agency, season of 1895.

JOSEPH'S RESERVE, No. 133.

Names of Indians.	Acres Sown.						Bushels Harvested.						Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Hay, tons.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Hay, tons.	Gardens.	
Painted Stone	4	....	2	·25	. .	·25	40	.....	20	50	.....	140	
Peter	1	....	1	.13	.....	·13	10	.....	10	40	.....	50	
Narcisse	1	.....	4	.13	.....	·13	10	.....	40	30	.....	60	
Alexis Louison	.....	.....	4	.13	. .	·13	.....	.....	40	60	.....	80	
Louison	....	.....	1	.50	.....	·13	.....	....	10	55	....	100	
Michel Paul	....	.....	1	·13	....	·13	.....	.....	6	20	.....	40	
Michel Small	.....	.....	2	·13	....	·13	.....	....	18	30	.....	40	
François	1	.....	4	·13	..	·13	10	....	28	40	....	15	
Alexis	1	....	1	·13	.....	·13	10	.....	10	10	.....	25	
Michel Petewasin	.....	....	2	·13	. . .	·13	.....	.....	20	15	.....	80	
Pierre Paul	2	.....	2	.25	.....	·25	10	.....	10	10	.... .	60	
Josse Paul	.....	.....	1	.25	.....	·13	....	.....	10	10	.....	100	
Alexis Paul	....	....	1	.25	.....	·13	.....	.. ..	8	10	.....	100	W. J. O'Donnell, Farmer.
Rosalie and Ann	....	....	. ..	.50	... .	·13	.....	.....	. ..	20	.....	110	Chas. deCazes, Indian Agent.
Total	10	.....	26	3·04	.....	2·06	90	. ....	230	400	....	1000	

RETURN showing Crops sown and harvested by individual Indians in Edmonton Agency, season of 1895.

PAUL'S RESERVE No. 133A.

No. of Band.	Names of Indians.	ACRES SOWN.										BUSHELS HARVESTED.										Remarks.
		Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Onions.	Gardens.	
	Paul, Head Man	4	2	4	....	25	....	....	....	....	·13	60	30	60	....	100	....	....	....	....	250	
	Simon, Head Man	2	....	2	....	·25	....	....	....	....	·13	20	....	20	....	60	....	....	....	....	100	
	Thomas	2	....	2	....	·13	....	....	....	....	·13	30	....	20	....	75	....	....	....	....	60	
	Peter	....	....	1	....	·13	....	....	....	....	·13	....	....	10	....	50	....	....	....	....	75	
	Luke	3	....	2	....	·13	....	....	....	....	·13	30	....	20	....	40	....	....	....	....	100	
	Dydimus	4	....	2	....	·13	....	....	....	....	·13	40	....	20	....	60	....	....	....	....	100	
	Burnt Stick, Head Man	....	....	2	....	·13	....	....	....	....	·13	....	....	15	....	30	....	....	....	....	50	
	Mr. John	2	....	2	....	·13	....	....	....	....	·13	14	....	12	....	40	....	....	....	....	20	
	John Susann	1	....	1	....	·13	....	....	....	....	·13	7	....	10	....	20	....	....	....	....	5	
	Joseph Susann	....	....	2	....	·13	....	....	....	....	·13	....	....	15	....	15	....	....	....	....	40	
	François	1	....	2	....	·13	....	....	....	....	·13	10	....	15	....	20	....	....	....	....	15	
	Isaac	....	....	2	....	·13	....	....	....	....	·13	....	....	18	....	30	....	....	....	....	40	
	John Bull	....	....	1½	....	·13	....	....	....	....	·13	....	....	14	....	25	....	....	....	....	60	
	John Sharphead	....	....	1½	....	·13	....	....	....	....	·13	....	....	14	....	40	....	....	....	....	40	
	John Bearshead	....	....	1	....	·13	....	....	....	....	·13	....	....	10	....	20	....	....	....	....	40	
	William Bearshead	1	....	2	....	·25	....	....	....	....	·13	5	....	10	....	30	....	....	....	....	200	
	Susann	....	....	....	....	·25	....	....	....	....	·13	....	....	....	....	40	....	....	....	....	75	
	Nancy	....	....	1	....	·13	....	....	....	....	·13	....	....	5	....	30	....	....	....	....	80	
	D. Yellowhead	1	....	2	....	·13	....	....	....	....	·25	4	....	8	....	35	....	....	....	....	40	W. J. O'DONNELL, Farmer.
	Susann Ironhead	....	....	2	....	·13	....	....	....	....	·25	....	....	....	....	40	....	....	....	....	80	CHAS. DECAZES, Indian Agent.
	Total	21	2	35	....	3·08	....	....	....	....	2·84	220	30	296	....	800	....	....	....	....	1470	

SAMSON'S RESERVE, No. 138.

11	Nepoos	8	....	2	....	....	....	....	....	....	·50	80	....	30	....	....	....	....	....	....	....	There was a very fair return of produce from the gardens, part of which was consumed during the summer and autumn and a quantity stored for winter use and seed.
118	Firing Stony	8	....	1	....	....	....	....	....	....	·50	80	....	15	....	....	....	....	....	....	....	
9	Saddleback	5	....	3	....	....	....	....	....	....	·50	50	....	45	....	....	....	....	....	....	....	
16	Red Deer	6	....	3	....	....	....	....	....	....	·50	60	....	45	....	....	....	....	....	....	....	
121	John Okemow	3	....	1	....	....	....	....	....	....	·25	30	....	15	....	....	....	....	....	....	....	
110	Okemow	4	....	2	....	....	....	....	....	....	·25	40	....	30	....	....	....	....	....	....	....	
66	John Twins	8	....	....	....	....	....	....	....	....	·50	80	....	....	....	....	....	....	....	....	....	

3	Buffalo Chips	8		3							1·00	80		45									
107	Alexis Soueskoopeness	6		1							·75	60		15									
68	Chimachess	5		3							·25	50		45									
69	Jas. Soosay	9									·50	90											
44	Crier	5		3							·50	50		45									
1	Samson	9		4							1·00	90		60									
103	Omachees	3									·13	30											
129	John Crier	8		3							·50	80		45									
38	Pierre Buffalo	7		4							·50	70		60									
104	Okeman										·50												
22	John Pots	5	3								·75	50	60										
114	Jas. Ragged Gut	10		4							·75	100		60									
91	Joe Buffalo	4									·13	40											
32	Louis	5		3							·75	50		45									
77	Little Pierre	4		2							·50	40		30									
131	Samuny										·25												
31	Simon	10	4	3							·50	100	80	45									
4	Soosay	7		3							·50	70		45									
61	Kyatipew	8									·75	80											
90	Joe Samson	5		4							·50	50		60									
34	Joshua	8		3							·50	80		45									
56	Omeasue	8									·50	80											
46	Big Baptiste	10		2							·50	100		30									
25	Little Baptiste	8		4							·50	80		60									
135	Alexis Kyatipew	4		3							·25	40		45									
134	Matthew			3							·25			45									
18	Soueskoopeness	5									·50	50											
132	Jacob Soueskoopeness	3		4							·50	30		60									
13	Jerry Pots	5		4							·50	50		60									
	Agency										1·00												
	Total	211	7	75							19·01	2110	140	1125									

D. L. CLINK,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Hobbema Agency, season of 1895.

ERMINESKIN'S RESERVE, No. 137.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.										Bushels Harvested.										Remarks.
		Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Pease.	Potatoes.	Turnips.	Carrots.	Mangel Wurzel.	Onions.	Gardens.	
1	Ermineskin	11·00	1·00	2·00	....	....	....	....	....	....	5	110	20	30	....	....	....	....	....	....	....	
48	Wildcat	7·00	1·50	1·50	....	....	....	....	....	....	3	70	30	22	....	....	....	....	....	....	....	
72	Bat	2·00	....	1·00	....	....	....	....	....	....	1	20	....	15	....	....	....	....	....	....	....	
86	Joe Sousay	3·00	....	....	....	....	....	....	....	....	1	30	....	....	....	....	....	....	....	....	....	
62	Roasting	4·00	1·00	1·00	....	....	....	....	....	....	3	40	20	15	....	....	....	....	....	....	....	
3	Kennewats	13·00	....	2·00	....	....	....	....	....	....	5	130	....	30	....	....	....	....	....	....	....	
317	Arthur	2·50	....	1·50	....	....	....	....	....	....	3	25	....	22	....	....	....	....	....	....	....	
52	Panny	11·00	4·50	2·00	....	....	....	....	....	....	5	110	90	30	....	....	....	....	....	....	....	
46	Lazy Joe	6·00	....	1·00	....	....	....	....	....	....	2	60	....	15	....	....	....	....	....	....	....	
3	Moses	7·00	1·00	3·50	....	....	....	....	....	....	1	70	20	53	....	....	....	....	....	....	....	
2	Stony Paul	8·00	....	3·50	....	....	....	....	....	....	3	80	....	53	....	....	....	....	....	....	....	
92	Skineek	4·00	....	....	....	....	....	....	....	....	1	40	....	....	....	....	....	....	....	....	....	
76	Mackino	12·00	....	2·50	....	....	....	....	....	....	4	120	....	37	....	....	....	....	....	....	....	
7	Headman	5·00	....	3·00	....	....	....	....	....	....	3	50	....	45	....	....	....	....	....	....	....	
84	William	6·00	....	1·00	....	....	....	....	....	....	2	60	....	15	....	....	....	....	....	....	....	
70	Pemees	6·00	2·00	1·00	....	....	....	....	....	....	1	60	40	15	....	....	....	....	....	....	....	
30	Rattlesnake	5·00	....	2·50	....	....	....	....	....	....	3	50	....	37	....	....	....	....	....	....	....	
66	Squianic	8·00	....	....	....	....	....	....	....	....	2	80	....	....	....	....	....	....	....	....	....	
35	Joe Ward	6·00	....	2·00	....	....	....	....	....	....	2	60	....	30	....	....	....	....	....	....	....	
59	Seeksagan	6·00	....	....	....	....	....	....	....	....	3	60	....	....	....	....	....	....	....	....	....	
65	Little Child	9·00	....	1·50	....	....	....	....	....	....	3	90	....	23	....	....	....	....	....	....	....	
81	Crane	3·00	....	1·00	....	....	....	....	....	....	2	30	....	15	....	....	....	....	....	....	....	
53	Stony Sam	6·00	....	2·00	....	....	....	....	....	....	3	60	....	30	....	....	....	....	....	....	....	
94	Atumay	5·50	....	....	....	....	....	....	....	....		55	....	....	....	....	....	....	....	....	....	
....	Noah	4·00	....	....	....	....	....	....	....	....	2	40	....	....	....	....	....	....	....	....	....	
85	Old Pan	2·50	....	1·50	....	....	....	....	....	....	2	25	....	23	....	....	....	....	....	....	....	
63	Ko-tass	5·00	....	3·00	....	....	....	....	....	....	2	50	....	45	....	....	....	....	....	....	....	
....	Nah-kow-wee-new	3·00	1·00	1·00	....	....	....	....	....	....	1	30	20	15	....	....	....	....	....	....	....	
88	Eustanc	4·00	....	....	....	....	....	....	....	....	2	40	....	....	....	....	....	....	....	....	....	
81	Charlie Crane	3·50	....	....	....	....	....	....	....	....	....	35	....	....	....	....	....	....	....	....	....	†Oats were cut green for feed.
	Total	178·00	12·00	41·00	....	....	....	....	....	....	7·0	1780	240	615	....	....	....	....	....	....	..	
	Home farm	....	†3	....	3	....	....	....	....	....	2	....	....	....	15	....	....	....	....	....	....	D. L. CLINK, Indian Agent.

LOUIS BULL'S RESERVE, No. 140.

16	Louis Bull	15·00	1·50	1·50	....	....	....	....	....	....	·4	150	30	22	....	....	....	....	....	....	....	
18	John Bull	11·00	3·00	1·50	....	....	....	....	....	....	·4	110	60	23	....	....	....	....	....	....	....	
17	Paul Bull	8·00	1·00	2·50	....	....	....	....	....	....	·3	80	20	37	....	....	....	....	....	....	....	
11	Francis	4·00	1·00	1·50	....	....	....	....	....	....	·2	40	20	23	....	....	....	....	....	....	....	
4	Moonias	3·00	....	1·50	....	....	....	....	....	....	·3	70	...	22	....	....	....	....	....	....	....	
9	John Ward	7·00	....	1·50	....	....	....	....	....	....	·2	50	....	23	....	....	....	....	....	....	....	
27	Sabaptiste	5·00	....	1·50	....	....	....	....	....	....	·1	50	....	22	....	....	....	....	....	....	....	
30	Louison	5·00	....	.....	....	....	....	....	....	....	·1	30	....	...	....	....	....	....	....	....	....	
4	Big Joe	6·00	....	.....	....	....	....	....	....	....	·2	60	....	.....	....	....	....	....	....	....	....	
123	Lazarus	4·00	1·50	2·50	....	....	....	....	....	....	·1	40	30	38	....	....	....	....	....	....	....	
	Old Wives	.....	....	....	....	....	....	....	....	....	·5	....	....	.....	....	....	....	....	....	....	....	
	Bobtail	.....	....	.....	....	....	....	....	....	....	·2	.....	....	.....	....	....	....	....	....	....	.....	
	Total	68·00	8.00	14·00	....	....	....	..	....	...	3·0	680	160	210	....	...	....	....	....	....	.....	D. L. CLINK, Indian Agent.

RECAPITULATION.

138	Samson	211	7	75	....	....	...	....	....	....	19	2110	140	1125	....	....	....	....	....	....	....	There was a very fair return of produce from the gardens, part of which was consumed during the summer and autumn, and a quantity stored for winter use and seed. *Oats cut green for feed. D. L. CLINK, Indian Agent.
137	Ermineskin	178	12	41	....	....	....	....	....	....	7	1780	240	615	....	....	....	....	....	....	....	
140	Louis Bull	68	8	14	....	....	....	....	....	....	3	680	160	210	....	....	....	....	....	....	....	
	Home Farm	.....	*3	.....	3	....	....	....	....	....	2	.....	...	.....	15	....	....	....	....	....	....	
	Total	457	30	130	3	....	....	....	...	....	31	4570	540	1950	15							

RETURN showing Crops sown and harvested by individual Indians in Battleford Agency, season of 1895.

MOOSOMIN'S RESERVE, No. 112.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.								Bushels Harvested.							Tons.	Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay.	
	White Cap	8	.....	.....	2·50	.....	.....	.....	.....	110	.....	.....	20	10	4·00	.....	.....	Hay was all cut by band at Round Hill — 450 tons.
	Towkesick	8	.....	.....		.....	.....	.....	.....	94	.....	.....	10	10	.....	.....	.....	
	Oosecap	6	.....	.....		.....	.....	.....	.....	64	.....	.....	10	10	.....	.....	.....	
	Blackstar	3	.....	.....		.....	.....	.....	.....	34	.....	.....	15	.....	.....	.....	.....	Cannot say what acreage of potatoes, turnips, &c., was seeded, as they were in small patches.
	Assassay	3	.....	.....		.....	.....	.....	.....	32	.....	.....	.....	.....	.....	.....	.....	
	Jossie	3	.....	.....		.....	.....	.....	.....	16	.....	.....	.....	.....	.....	.....	.....	
	Nanekutch	2	.....	.....		.....	.....	.....	.....	22	.....	.....	.....	.....	.....	.....	.....	
	Kookoos	2	.....	.....		.....	.....	.....	.....	14	.....	.....	.....	.....	.....	.....	.....	
	Kapatuaymat	5	.....	.....		.....	.....	.....	.....	48	.....	.....	.....	.....	.....	.....	.....	2½ acres of potatoes sown on home farm by Indians yielded 250 bushels, which was divided among the band.
	Band	.....	8	7	2·50	4	.....	.....	2	.....	50	.....	250	.....	.....	.....	450	
	Total	40	8	7	5·00	4	.....	.....	2	434	50	.....	305	30	4·00	.....	450	R. H. MAIR, Farmer.

SWEET GRASS' RESERVE, No. 113.

	Nokosit	.....	5	.....	·50	.....	.....	.....	·50	.....	80	.....	16	10	2·00	·50	.....	Onions, carrots and turnips all grown in gardens. A good deal of garden stuff eaten while green; also about 100 bushels of potatoes eaten by Indians in August, September and October.
	Sweet Grass	.....	.....	.....	·50	.....	.....	.....	·50	.....	.....	.....	15	5	1·00	.....	.....	
	Baptiste	.....	.....	.....	·25	.....	.....	.....	·25	.....	.....	.....	18	10	·50	·25	.....	
	Ploughman	.....	.....	4	·50	.....	.....	.....	·50	.....	.....	7	15	12	1·00	·50	.....	
	Mussanan	.....	.....	.....	·50	.....	.....	.....	·25	.....	.....	.....	30	15	2·00	.....	.....	
	Mistaysa	.....	.....	.....	·50	.....	.....	.....	·25	.....	.....	.....	20	8	·50	·25	.....	
	Fine Day	3	.....	.....	.....	.....	.....	.....	·25	20	75	.....	.....	6	1·00	.....	.....	
	Sakemayo	.....	5	.....	·50	.....	.....	.....	·25	.....	.....	.....	15	10	1·00	·25	.....	
	Luckwenow	3	.....	.....	·50	.....	.....	.....	·25	10	.....	.....	15	8	·25	·25	.....	
	Big Thunder	.....	.....	.....	·50	.....	.....	.....	·25	.....	.....	.....	15	8	·50	.....	.....	Hay all put up together by band.
	Niske Snoot	.....	.....	.....	·50	.....	.....	.....	·25	.....	.....	.....	15	12	1·00	·25	.....	
	Kyasakan	2	.....	.....	·25	.....	.....	.....	·25	15	.....	.....	15	6	1·00	·25	.....	F. A. D. BOURKE, Farmer.
	Coming Day	.....	.....	4	.....	.....	.....	.....	·25	.....	.....	8	11	15	·50	.....	.....	
	Total	8	10	8	5·00	.....	.....	.....	4·00	45	155	15	200	125	12·25	2·50	750	P. J. WILLIAMS, Indian Agent.

THUNDERCHILD'S RESERVE, No. 115.

Thunderchild	5			·25			·25		10			10	25			400	
Yellow Head				·25			·25					40	30				
Chipayan	3			·25			·50		15			8	15				
Jimmie				·50			·25					16	10				
Peter				·25			·25					15	20				
Ahanias	5			·50			·25					10	15				
Paddy				·50			·25					10	30				
Ohinny				·25			·25					6	15				
Alexander	6			·25			·25		15			8	20				
Josey				·25			25					5					
Ochepanay				·25			·25					5	16				
Wapas				·25			·25					15	30				
Angus				·25			·25					20	40				R. FINLAYSON, Farmer.
Home Farm		11	9	2·00			·50			56		150	25				P. J. WILLIAMS, Indian Agent.
Total	19	11	9	6·00	..		4·00		40	56		318	291			400	

RED PHEASANT'S RESERVE, No. 108.

Wattanee and Thomas												30	5	·50	·07	
Isaac Wattanee												20	50	·25	·07	
Baptiste												30	15	·25	·07	These families have their gardens in common.
Sarah				1	·25	·04	·04	1·35				8				
Pecnawis												61	4	·25	·07	
Okooshaysis												10	2	·25	·07	
John Armstrong												10	2	·25	·07	
Koopepequanacit												12	4	·25	·07	
Nepayhat												45	2	·07	·20	
Jean Baptiste												15	3	·07	04	
Soonias												10	6	·07	·04	These families have their gardens in common.
Nustetemacappo												21	2	·07	·04	
Jacob Nustetemacappo												15		·07	·04	
Spogonish				2	·13	·04	·04	2·21				20	1	·07	·04	
Mywian												10	1	·07	·04	
Peaychew												38	5	·07	·04	
Kapayeekanmot												55	2	·07	·04	
Kytstaho												28	2	·07	·04	
Okunowkapit												30	2	·07	·04	
John Thomas												15	2	·07	·04	
Carried forward				3	·38	·08	·08	3·56				483	110	2·84	1·13	

RETURN showing Crops sown and harvested by individual Indians in Battleford Agency, season of 1895—*Continued.*

RED PHEASANT'S RESERVE, No. 108.—*Continued.*

Nos. of Pay Tickets.	Names of Indians.	ACRES SOWN.								BUSHELS HARVESTED.							TONS.	Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay.	
	Brought forward	.....	.....	.....	3	·38	·08	·08	3·56	.....	.....	.....	483	110	2·84	1·13	.....	
	Okasquascouchon									.....	.....	.....	32	10	.....	.....	.....	These families had their gardens in common, excepting Musinas, who had his at the home farm.
	Jacob Tobacco Juice									.....	.....	.....	23	10	.....	.....	.....	
	Adam									.....	.....	.....	18	5	.....	.....	.....	
	Moccasin									.....	.....	.....	15	.....	.....	.....	.....	
	Kyasapot	.....	.....	.....	1	·13	.....	.....	.....	.....	.....	.....	25	5	.....	.....	.....	
	Papapuy									.....	.....	.....	20	1	.....	.....	.....	
	Nusasquot									.....	.....	.....	15	.....	.....	.....	.....	The wheat, oats and barley under control of home farm.
	Kenopatch									.....	.....	.....	35	5	.....	.....	.....	
	Musinas									.....	.....	.....	32	40	.....	·04	.....	
	Band	·50	10	5	.....	.....	.....	.....	.....	5	186	100	.....	.....	.....	.....	1,075	
	Total	·50	10	5	4	·51	·08	·08	3·56	5	186	100	698	186	2·84	1·17	1,075	JUSTUS WILLSON, Farmer.

POUNDMAKER'S RESERVE, No. 114.

73	Basil Favel	6	10	5	·25	·50	·13	·07	·50	.....	.....	.....	4	15	4	.....		
103	Antoine	2			·25	·25	.....	·07	.....	6	.....	.....	3	3	.....	.....		
99	Chatsus	2			·25	·25	.....	·07	·25	.....	.....	.....	3	4	.....	.....		
3	Kanapawitch	1			·25	·25	.....	·13	·50	.....	.....	.....	2	4	.....	.....		Garden stuff consumed by Indians.
59	Euaysecan	2			·50	·25	·13	·13	·25	.....	.....	.....	4	4	3	.....		
123	Choochooses	2			·25	·25	.....	·13	·25	.....	.....	.....	3	3	.....	.....		
1	Mrs. Poundmaker	.....			·25	·25	.....	.....	.....	.....	.....	.....	1	3	.....	.....		
22	Peyacutch	.....	Farm.	Farm.	.....	·50	·13	·13	·25	.....	.....	.....	.....	5	3	.....	Band.	
100	Jack	.....			.....	·25	.....	·07	.....	.....	.....	.....	.....	3	.....	.....		NOTE.—22 acres oats and 14 acres barley sown on farm 12 B & C.
5	Jacob	.....			.....	·50	.....	·13	.....	.....	.....	.....	.....	5	.....	.....		
13	Najopiskepaween	.....			.....	·50	.....	.....	.....	.....	.....	.....	.....	5	.....	.....		
31	Nicicawases	.....			.....	·25	.....	·13	.....	.....	.....	.....	.....	2	.....	.....		
40	Samogonish	.....			.....	·25	.....	.....	.....	.....	.....	.....	.....	2	.....	.....		CHAS. DEGEAR, Farmer.
67	Shooting Eagle	.....			.....	·25	·13	.....	.....	.....	.....	.....	.....	2	3	.....		P. J. WILLIAMS, Indian Agent.
	Total	15	10	5	2·00	4·50	·52	1·06	2·00	6	.....	.....	20	60	13	.....	325	

LITTLE PINE'S RESERVE, No. 116.

140	Bemmie	2	Control of farm.	Control of farm.	·25	·50	·07		·50				7	10	Failure.			Garden stuff consumed by Indians.
152	Sapustagan	2				·25	·07		·25					5				
154	Boness	1			·25	·25			·25				3	3				
159	Wenmie	2			·25	·25	·07						4	3				
88	Musqua	2			·25	·25	·13		·50				9	8				
163	Napayhen	1			·25	·25	·07		·25				3	2				
90	Tatapooch				·25	·50	·07		·25				7	10				
143	Tchuqunow				·25	·25							15	10				
205	Okennow				·25	·25	·07		·25				8	8				
145	Kescotagun				·25	·25			·25				12	4				
116	Kaykaykavao				·25	·25							9	5				
84	Kamakootao				·25	·25							12	7				
146	Uskenukappo				·13	·25			·50				5	3				
118	Okitchewin				·13	·25							15	6			325	
	Total	10	12	9	3·01	4·00	·55		3·00				109	84			325	CHAS. DEGEAR, Farmer.

STONY RESERVE, Nos. 109, 110 and 111.

	Bostogoon				·25	·25	·25						22	20	3		Band.	
	Tibio or Lean Man				·50	·50							55	40	2			
	Ink John's Wife				·25								18		4			
	Skeena Sappa				·25	·25							28	30	7			
	Tat-tongon				·25		·25						30		5			
	Wa-to-caw				·25	·13							45	45	10			
	Pahasic Skeecha				·25	·13							36	50	6			
	Wa-nobin				·13								16		2			
	Hoskishuce				·13	·25							27	35				
	Jew Quesh				·13		·07						12		2			
	Togan-sa-bosh				·13								30					
	Mosquito				·50	1·50	·07						50	100				
	Nipahox				·50								24		2			
	Tat-togi-unk				·13								20		1			
	Peas Conthay				·25	·50							25	15				
	Tat-tonga-seat				·13								15					
	Oshin				·25		·13						12		1			
	Stench Iaco				·25								16		1			
	We-box-sin				·50	·50							35	15				
	Utombehegia				·50		·13						40		3			
	Hoobosskoskos				·25								44		1			
	Isak Molke				·25								10					
	Home farm		8	6							186	57						S. WARDEN, Farmer.
	Total		8	6	6·03	4·01	·90				186	57	610	350	50		600	P. J. WILLIAMS, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Onion Lake Agency, season of 1895.

SEEKASKOOTCH RESERVE, No. 119.

Nos. of Pay Tickets.	Names of Indians.	ACRES SOWN.							BUSHELS HARVESTED.							Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Gardens.	
	Band 119.															
17	Jonas Vivier	5	.....	5	·25	·25	.....	.....	40	.....	63	10	.....	.....	.....	
18	Antoine Muskago	.....	.....	13	·50	·50	.....	.....	.....	.....	228	44	.....	.....	.....	
19	Wm. Seecose	2	.....	6	·50	39	.....	.....	26	.....	121	22	.....	.....	.....	
27	Nickawasis	.....	.....	3	·25	·25	.....	.....	.....	.....	16	13	.....	.....	.....	
30	Augustine Vivier	18	.....	6	·65	·25	.....	.....	189	.....	103	95	.....	.....	.....	
39	Whetstone	.....	.....	10	·25	·13	.....	.....	.....	.....	98	39	.....	.....	.....	
49	Chocan-o-son	3	.....	15	·50	·25	.....	.....	12	.....	245	18	.....	.....	.....	
59	Menokutchewais	.....	.....	.....	·50	·25	.....	.....	.....	.....	.....	38	.....	.....	.....	
61	Waskahat	.....	.....	12	·25	·13	.....	.....	.....	.....	101	7	.....	.....	.....	
67	Kee-chay-new	10	3	18	·50	·25	.....	.....	82	20	143	19	.....	.....	.....	
68	Yah-yah-e-chewan	5	.....	17	·50	·25	.....	.....	33	.....	335	14	.....	.....	.....	
71	Little Wolf	.....	.....	6	.....	·13	.....	.....	.....	.....	12	.....	.....	.....	.....	
72	Patagan	11	.....	9	·25	·25	.....	.....	89	.....	83	10	.....	.....	.....	
75	Antoine Jebleaux	.....	.....	11	·50	·50	.....	.....	.....	.....	91	28	.....	.....	.....	
77	Gilbert Myowasis	5	.....	9	·39	·39	.....	.....	.....	.....	.....	33	.....	.....	.....	
78	Mis-see-hayo	.....	.....	14	·50	·25	.....	.....	.....	.....	241	28	.....	.....	.....	
79	Ah-kee-new	.....	.....	8	·25	·13	.....	.....	.....	.....	111	18	.....	.....	.....	
81	Cane-potato	5	.....	8	·25	·25	.....	.....	22	.....	84	29	.....	.....	.....	
86	Misatimawasis	.....	.....	9	·50	·25	.....	.....	.....	.....	80	19	.....	.....	.....	
90	O'pesinow	4	.....	4	·25	·13	.....	.....	18	.....	29	14	.....	.....	.....	
91	Sam Myowasis	4	.....	9	·50	·13	.....	.....	19	.....	28	10	.....	.....	.....	
4	Manetonekick	.....	.....	12	·50	·25	.....	.....	.....	.....	97	19	.....	.....	.....	
11	Albert	.....	.....	8	·50	·13	.....	.....	.....	.....	131	48	.....	.....	.....	
	Band 120.															
1	Young Chief	.....	.....	15	·25	·25	.....	.....	.....	.....	102	39	.....	.....	.....	
2	Isadore Moyat	5	.....	9	·50	·50	.....	.....	30	.....	73	27	.....	.....	.....	
15	Sahwayo	.....	.....	11	·25	·25	.....	.....	.....	.....	116	10	.....	.....	.....	
20	Alexcee and Son	3	.....	10	·50	·25	.....	.....	29	.....	50	6	.....	.....	.....	
35	Moochewinees	3	.....	9	·25	·25	.....	.....	38	.....	52	18	.....	.....	.....	
38	John Baptiste	.....	.....	.....	·25	·25	.....	.....	.....	.....	.....	16	.....	.....	.....	

39	Matuce			10	·25	·25					83	10				
42	Montana			7	·13	·13					48	8				
30	Ka-mee-was-sit			5	·25						47	5				
	Band 121.															
47	Francis Monson	5		9	·50	·25			11		53	11				
49	John Belly	5		8	·25	·13			9		36	13				
	Band 122.															
22	Nee-pow-quay-tou			8	·25	·25					45	15				
24	Na-ta-mis-na-wat			10	·25	·13					37	19				
31	Gustave and Thunder	9	3	28	1·00	·50			63	16	198	36				
52	Ah-ma-hoose	5		11	·25	·25					91	15				
64	Badger	3		14	·25	·25		Band.	26		96	26				
71	Sam John			5	·13	·13					30	13				
72	Sam Woskwitch			14	·50	·25					146	20				
8	Nisayin Ree			5	·25	·13					7	9				
	Total	110	6	400	15·30	10·00		4	736	36	3,750	891				
	Band 124.															
	Chippewayan			12	8·00	2·00		2·00			125	420				
	Agency		19		·50	·25	·25	·50		99		100	20	10		

GEO. G. MANN,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Blackfoot Agency, season of 1895.

NORTH BLACKFOOT RESERVE, No. 146.

Nos. of Pay Tickets.	Names of Indians.	ACRES SOWN.						BUSHELS HARVESTED.								Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Onions.	Gardens.	Wheat.	Oat straw, tons.	Barley straw, tons.	Potatoes.	Turnips.	Carrots.	Onions.	Hay, tons.	
E 1	Old Sun				·25		Band.				5					
4	Old Brass				·25						5					
14	Calf Flying				·25						10					
20	Old Fox				·13						6					
35	Moving Camp				·13						8					
	Total				1·01		2·25				34					Garden.
I 62	Yellow Horse		5	4	·25		Band.				20					One acre of turnips, carrots and onions put in by band. These were consumed during summer months.
49	Pheasant				·13						10					
63	Many-turning-robes-over				·13						10					
66	Little Person				·13						18					
68	Not Good				·25						33					
67	Water Chief				·13						7					Also 5 tons barley straw.
	Total		5	4	1·02		2·25		·15	·25	98					
K 6	Crooked Meat String		5	3	·50		Band.		6	3	15				10	Turnips, carrots and onions were sown in gardens and consumed during summer months.
14	Running Kilfox				·50						12					
18	Chief's Leggings				·50						18					
40	Little Calf		2	1	·25				3	2	21				25	
43	Medicine Traveller				·25						7					
44	James Appikokie		3	2	·50				5	4	23				35	
47	Yellow Fly				·25						6					
52	Low Horn's Son				·25						5					
10	Wolf Ear				·25						8					
17	Red Blanket				·25						9					
28	Running Rabbit				·25						7					
9	Wolf Head				·25						5					
	Total		10	6	4·00		3·13		14	9	136				70	

W. M. BAKER,
Farmer.
MAGNUS BEGG,
Indian Agent.

L 1	White Pup		3		·13				9		6				35	Turnips, carrots and onions were sown in gardens and produce consumed during summer months with the exception of that belonging to "Little Axe."
3	Greasy Forehead		3	2	·13				8	3	10					
6	Boss Rib Medicine			1	·13					1	5				7	
7	Bull Shoe				·13						7					
26	Black Boy				·13						27				30	
34	Nose Cutter				·13						11					
38	Spotted One				·13						10					
39	Tried-to-Fly-but-Couldn't				·13						9					
44	Big Road		3	2	·13				5	3	18					
51	Old Crow		1	1	·13				2	2	13					
61	Little Axe				·75						55	60	5	5	50	
65	Iron Horn														5	
	Total		10	6	2·05		3.13		24	9	171	60	5	5	127	
M 3	Calf Child				·13						10					Turnips, carrots and onions sown in gardens and consumed during the summer months.
26	Red Old Man				·13						6				5	
29	Many Good				·13						6					
48	Only Owl				·13						7					
55	Yellow Tail Feathers			2	·13					5	13					
	Total			2	·65		2·13			5	42				5	
R 1	Weazel Child				·13						11					
22	Many Shots				·13						5					
41	Snowshoe Walker				·13						5					
	Total				·39		2·13				21					
N 47	Running Marten		3	2	·13				6	2	7					
22	Wolf Tail				·25						19					
35	Many Times Going In				·13						9					
48	Crane Chief				·13						8					
62	Shooting Down				·13						5					Turnips, carrots, &c.
33	Raw Eater														15	
	Total		3	2	·77		1·13		6	2	48				15	
O 1	Big Plume			1	·25					1	15					
9	Old Cree		3	1	·25				7	2	27					
11	Skunk Tallow				·25						16					
69	The Calf				·13						8					
71	Stabbed Last				·13						9					
	Carried forward		3	2	1·01				7	3	75					

W. M. Baker,
Farmer.
Magnus Begg,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Blackfoot Agency, season of 1895.

NORTH BLACKFOOT RESERVE, No. 146—*Continued.*

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.						Bushels Harvested.								Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Onions.	Gardens.	Wheat.	Oat straw, tons.	Barley straw, tons.	Potatoes.	Turnips.	Carrots.	Onions.	Hay, tons.	
	Brought forward	....	3	2	1·01	.....	.....	.....	7	3	75	.....	....	.....	.....	
85	Crow Shoe	.....	2	3	·50	.....		.....	5	6	31	.....	.....	.....	55	
99	Wolf Child	.....	.....	.....	·13	.....		.....	.....	.....	7	.....	.....	.....	.....	
100	The Sun	.....	.....	.....	·13	.....		.....	.....	.....	5	.....	.....	.....	.....	
102	Northern Eagle	.....	.....	.....	·13	.....		.....	.....	.....	6	.....	.....	.....	.....	
106	Crane Bear	.....	.....	.....	·13	.....	Band.	.....	.....	.....	6	.....	.....	.....	.....	
110	True Horse	.....	.....	.....	·13	.....		.....	.....	.....	5	.....	.....	.....	.....	
111	Peacemaker	.....	.....	.....	·13	.....		.....	.....	.....	5	.....	.....	.....	.....	
	Total	.....	5	5	2·29	.....	3·13	.....	12	9	140	.....	.....	.....	55	

RECAPITULATION.

	Band E	.....	.....	.....	1·00	.....	2·13	.....	.....	.....	34	.....	.....	.....	.....	
	" I	.....	5	4	1·00	.....	2·13	.....	15	25	98	.....	.....	.....	.....	
	" K	.....	10	6	4·00	.....	3·13	.....	14	9	136	.....	.....	.....	70	
	" L	.....	10	6	2·00	.....	3·13	.....	24	9	171	60	5	5	127	
	" M	.....	.....	2	·65	.....	2·13	.....	.....	5	42	.....	.....	.....	5	
	" R	.....	.....	.....	·39	.....	2·13	.....	.....	.....	21	.....	.....	.....	.....	W. M. BAKER, Farmer.
	" N	.....	3	2	·75	.....	1·13	.....	6	2	48	.....	.....	.....	15	
	" O	.....	5	5	2·25	.....	3·13	.....	12	9	140	.....	.....	.....	55	
	Total	.....	33	25	12·04	.....	19·04	.....	71	59	690	60	5	5	272	MAGNUS BEGG, Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Blackfoot Agency, season of 1895.

SOUTH BLACKFOOT RESERVE, FARM No. 20A.

Nos. of Pay Tickets.	Names of Indians.	ACRES SOWN.							BUSHELS HARVESTED.									Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Hay—Tons.	Straw.	
A 1	Hind Bull	1·00	1·00	1·00	·25	·50	·13	·13	.....	...	.....	32	30	2	2·00	.....	15	
30	Tallow Belly	...	1·00	·50	·25	.....	.....	.....	.....	....	.....	32	.....	.....	....	.....	.....	
29	Medicine Shoe	...	1·00	·50	·25	.....	.....	.....	.....	....	.....	32	.....	.....	....	.....	.....	
33	White Buffalo Mane	.....	1·00	·50	·25	.....	.....	.....	.....	.....	.....	32	.....	.....	.....	.....	.....	
34	Many Shot At	.....	1·00	·50	·25	.....	.....	.....	.....	.....	.....	32	.....	.....	.....	..	..	
39	Outside Attack	.....	·50	·25	·13	.....	.....	..	.....	.....	.....	20	....	.....	.....	.....	.....	
66	Went To Tell	.....	·50	·25	·13	.....	...	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	
78	Weazel Tail	.....	·50	·25	·13	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	
113	Black Eagle	.....	·50	·25	·13	.....	...	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	
177	Night Chief	.....	·50	·25	·13	.....	.....	....	.....	....	....	20	.....	.....	.....	..	.....	
101	Crowf ot, widow of	....	·50	·25	·13	.....	..	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	
94	Laughing Dog	....	·50	·25	·13	.....	.....	...	...	.....	.....	20	.....	.....	.....	.....	.....	
128	Many Chiefs	.....	·50	·25	·13	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	
47	Iron Shield	·25	2·00	·50	·25	·25	·07	·07	4	60	15	35	40	5	3·00	25	.....	
28	High Eagle	·25	2·00	·50	·25	.....	.....	.....	4	60	15	35	.....	.....	.....	.....	.....	
49	Big Body	·25	·50	...	·25	.....	.....	.....	4	15	.....	35	.....	.....	.....	.....	.....	
81	Many Mixtures	·25	·50	.....	·13	...	.....	...	4	15	...	17	.....	.....	.....	.....	.....	
87	Crow Collar No. 2	.....	·50	·25	·25	.....	.....	.....	.....	.....	8	35	.....	.....	.....	.....	.....	
C 1	Weazel Calf	·50	2·00	·50	·25	·50	·13	·13	.....	.....	....	35	80	3	2·00	.....	30	
12	Big Snake	·25	·50	·25	·13	.....	.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	
27	Elk Getting Up	.....	·50	·25	·25	.....	.....	.....	.....	.....	.....	35	.....	.....	.....	.....	.....	
47	The Moon	·25	·50	....	·13	.....	.....	.....	.....	.....	.....	17	.....	....	...	.....	.....	
3	Dog Child, son of	·25	1·50	·25	·13	....	.....	.....	.....	.....	.....	18	.....	.....	.....	.....	.....	
A 44	Coming-over-the-hill	·25	·50	.....	·25	..	.....	.....	.....	.....	.....	35	.....	.....	.....	.....	.....	
38	One-that-will-fly	·25	·50	.....	·13	.....	.....	.....	.....	.....	.....	18	.....	.....	.....	.....	..	
H 3	Little Bear	.....	1·00	·25	·25	.....	.....	.....	.....	..	....	35	.....	.....	.....	.....	..	
21	Black Fever	·25	1·00	·25	·25	.....	.....	.....	.....	.....	.....	35	.....	.....	.....	.....	.....	
1	Medicine Shield	.....	2·00	·50	·25	·25	·07	·07	.....	.....	.....	35	25	3	2·00	42	10	
4	Poor Eagle	.....	·50	·50	·13	.....	.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	
42	Dried Limb	.....	·50	·25	·13	.....	.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	G. H. WHEATLEY, Farmer.
43	Spring Chief	..	·50	·25	·25	.....	..	.....	.....	.....	...	35	.....	.....	.....	.....	.....	
36	Brave Bull	....	·50	·25	·13	....	....	.....	.....	.....	.....	18	.....	...	.....	.....	.....	MAGNUS BEGG, Indian Agent.
	Carried forward	3·01	26·50	9·75	6·08	1·50	·40	·40	16	150	38	844	175	13	9·00	67	55	

Return showing Crops sown and harvested by individual Indians in Blackfoot Agency, season of 1895—*Concluded.*

SOUTH BLACKFOOT RESERVE, FARM No. 20A—*Concluded.*

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.							Bushels Harvested.									Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Onions.	Wheat.	Oats.	Barley.	Potatoes.	Turnips	Carrots.	Onions.	Hay—Tons.	Straw.	
	Brought forward....	3·01	26·50	9·75	6·08	1·50	·40	·40	·16	150	38	844	175	13	9·00	67	55	
D 26	Striped Squirrel.....	.....	·50	·25	·25	.....	.....	.....	.....	.....	.....	35	.....	.....	.....	.....	.....	
J 1	Rabbit Carrier.....	2·00	·50	·13	·13	·25	·07	·07	.....	.....	.....	13	5	2	1·00	.....	15	
9	Calling Close.....	·50	·50	·13	·13	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	
20	Wolf Collar.....	.....	2·00	·25	·25	·25	·07	·07	.....	.....	.....	25	5	2	2·00	13	.....	
33	The Black.....	1·00	·50	·13	·13	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	
G 33	Bad Dried Meat.....	·50	·50	.....	·13	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	
C 2	Running Wolf	.....	1·00	1·00	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
G 39	Bob Tail Horse.....	.....	·50	.....	·13	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	
1	Eagle Rib.....	.....	1·00	·50	·25	·50	·13	·13	.....	.....	5	25	20	3	1·00	40	20	
2	Bad Old Man.....	.....	·50	·50	·13	.....	.....	.....	.....	.....	5	13	.....	.....	.....	.....	.....	
4	Cowskin Moccasin.....	.....	·50	.....	·13	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	
5	Standing-up-smoking.....	.....	·50	·50	·25	.....	.....	.....	.....	.....	5	25	.....	.....	.....	.....	.....	
6	Spotted Calf No. 2.....	.....	·50	.....	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
16	Running Calf.....	.....	·50	·50	·25	.....	.....	.....	.....	.....	5	25	.....	.....	.....	.....	.....	
46	Bear Shield.....	.....	·50	1·00	·25	.....	.....	.....	.....	.....	10	25	.....	.....	.....	8	.....	
40	White Dog.....	.....	·50	.....	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
48	Leather	.....	·50	.....	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
56	Crow Chief.....	.....	·50	.....	·25	.....	.....	.....	.....	.....	5	25	.....	.....	.....	.....	.....	
65	Bad Old Man, son of	.....	·50	·50	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
66	Crow Chief, son of.....	.....	·50	.....	·25	.....	.....	.....	.....	.....	5	25	.....	.....	.....	.....	.....	
68	The Sleigh	.....	·50	·50	·13	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	
D 1	Running Rabbit.....	1·00	2·00	1·00	·75	·25	·13	·13	.....	.....	.....	75	20	4	2·00	.....	20	
2	Spotted Calf	·50	1·25	·50	·50	.....	.....	.....	.....	.....	.....	50	.....	.....	.....	.....	.....	
10	Wolf Shoe.....	.....	·50	·50	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
11	Many Bears.....	.....	1·00	·50	·50	.....	.....	.....	.....	.....	.....	50	.....	.....	.....	.....	.....	
25	Bear Hat.....	·50	·25	·50	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
33	Old Woman at War.....	·50	·50	·50	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
41	Chief Duck.....	·50	·50	·50	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
42	Bear Robe	·50	·50	·50	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	
43	Calf Bull.....	.....	5·50	·50	·75	·25	.....	.....	.....	.....	.....	75	30	.....	.....	25	7	
68	Black Face Chief.....	.....	·50	·50	·25	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	.....	

	72	Close Shooter	25	50	50	25							25						
	73	Hard Collar		50	50	25							25						
A	155	Gun Cover Woman, son of	25	50	50	25							25						
F	1	White Calf Robe		1 00	25	25	50	13	13				25	5	2	1 00		4	
	19	Weazel Bear		25		25							25						
	21	White Wolf		25	25	25							25						
	38	Bull Going Down				13							13						
	39	The House		25	25	13							13						
J	34	Sitting Eagle			25	13							13						
A	168	White Calf, son of		25		13							13						
P	1	White Eagle	25	3 00	1 00	25	25	07	07			29	35	10	2	1 00		15	
	8	Iron Head		50	25	25						7	34						
	14	Chief Sitting		50		13							15						
	41	Yellow Door	25	50	25	25						7	34						
	43	Running Owl	25	50	25	13						7	15						
	55	The Writer		50		13							15						
	60	Running Owl, son of		50		13							15						
	64	Tail Feathers		50	25	25						7	34						
A	58	Little Chief	25	50	25	25						7	34						
Q	11	Three Eagles	25	2 00	1 00	25	25						34	10	2	1 50	12	10	
	25	Little Good Man	25	50	25	25							34						
	44	Wolf Tail		50	25	13							15						
	46	Only Chief Running		50	25	25							34						
Y	22	Good Young Man	25	1 50	25	25	25	07	07				34	8	2	1 50	20		
	10	Big Eye			25	13							15						
	4	Tail-with-the-hair-off	25	50	25	13							15						
	6	Bad Old Man	25	50	25	13							15						
	15	Brass Plate Man	25	50	25	13							15						G. H. Wheatley, Farmer.
	13	Only Eagle		50	25	13							15						Magnus Begg, Indian Agent.
	9	Little Skunk	25	50	25	25							34						
H	23	Wolf Leg	25	50	25	25							34				20		
		Total	14 01	70 50	29 64	20 44	4 25	1 07	1 07	16	150	142	2410	288	32	20 00	205	146	

RETURN showing Crops sown and harvested by individual Indians in Sarcee Agency, season of 1995.

STONY RESERVE, No. A.

Names of Indians.	Acres Sown.						Bushels Harvested.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Hay—Tons.	Garden Stuff.	
Bear's Paw		5		25		04				16		5	5	
James Ryder		2		13		04				5		2		
James Dixon		5		13		04				5		5		
Moses Bear's Paw		3		13		04				6		3	1	
John Dixon				13		04				4				
Mark Ear				13						4				
John Rocky Mountain		2		25		04				15		3	3	
Widow James Dixon				07		04				2			1	
Stephen Ryder				13		04				4				
Sam Baptiste				13		04				3		2		
Paul Ryder		2		25		04				12		2		
John Dixon				07		04				2		3	4	
Peter Hunter				13		04				4				
Daniel Big Man				13		04				4				
Simon				13		04								
Widow John Lazarus				07		04								
William Rocky Mountain				25						15		3	3	
Thos. Kaquits				13		04				2		2	1	
Ben Kaquits		2		13		04				2		5		
Stephen Jonas				07		04						2		
Amos Jonas				07		04				4		2		
Ebenezer				13		04				4				
Thos. Two Young Men				13		04				3			2	
Nancy Bear's Paw				07		04				3			1	
Annie Bear's Paw				07		04				2				
John Mark		1		13		04				3		2		
Ezra Left Hand				13		04				5				
David Bear's Paw				13		07				5		2	2	
Rabbit				07		07				2				
Philip Adam				13		07				6				
Mark Dixon				07		07				3				
Samuel Ryder				07		07				2			2	

Mark Hunter				·07		·07				2			
John Simon				·07		·07				3			
Total		22		4·18		1·49				152		43	25

STONY RESERVE, No. B.

Hector Nimrod				·13		·04				8		6	These Indians are stock-raisers and hunters and do not go in for raising grain.
Amos Poucette		2		·13		·04				7		2	
Ben Red Fox				·07		·04				4		2	
Widow George Ear		1		·07		·04				3		1	
Widow Job Beaver				·07		·04				5		1	
David Poucette				·13		·04				6		2	
John Abraham				·13		·04				7		2	
James Jacob				·13		·07				9		1	
George Poucette				·13		·04				8		2	
Mary Jane Beaver				·25		·04				12			
Ann Abraham				·07		·04				4			
Paul Beaver				·25		·04				14		2	
Little Mary				·13		·04				4			
Jonas Good Stony				·13		·04				5		2	
Joseph Hunter				·13		·07							
Jimmy John		2		·13		·04						2	
Moses House		2		·13		·07				4		2	
Amos Big Stony		3		·13		·07				5		2	
Peter Wesley		3		·13		·04				6		5	
Joseph Snow		1		·13		·04				7		2	
Mark Poucette				·07		·04							
Peter Hunter				·07		·04						1	
Joseph Dixon				·07		·04				2			
James Swampy		1		·13		·04				2		1	
Mark Wesley				·13		·04				3		1	
George Two Young Men				·13		·04						1	
Joseph William				·07		·04						1	
Silas Abraham				·13		·07						1	
William Soldier				·07		·07							
William Wesley				·13		·07				8		1	
Jonas Patrick				·13		·07				7			
Moses Cree				·07		·07				2			
John Poucette				·13		·07				5		2	
Widow John Wesley				·13		·07				9			
Emma House				·13		·07				4			
Total		15		4·19		1·76				140		45	P. L. GRASSE, Farmer.

Return showing Crops sown and harvested by individual Indians in Sarcee Agency, season of 1895.

STONY RESERVE, No. C.

Names of Indians.	Acres Sown.						Bushels Harvested.							Remarks.
	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Hay—Tons.	Garden Stuff.	
Chiniquay		1		13		07				2		5		
George Two Young Men				13		07				1				
George Crawler		1		07		04						3		
Ben Chiniquay				07		04				2		2		
George Hunter				07		04						1		
Jonas Two Young Men		3		13		04				5		11		
Thomas Chiniquay		3		13		04				2		10		
Simeon				07		04				4		2		
Joseph Chiniquay				07		04								
Isaac Rolling Mud				07		04				3				
Jacob Two Young Men		2		07		04				7		5		
George Cecil				07		04				5				
Noah Hunter				07		07						2		
William Hunter				07		07				3		2		
Hector Crawler				07		07				3			1	
Ann Chiniquay				07		07								
Mary Cecil				07		07							1	
Daniel				07		07						2		
Joshua Hunter				07		07				2				
Paul Two Young Men				13		07						2		
Luke Powder Face				07		07						4		
Enoch Wildman				07		07				4		2	1	
John Two Young Men				13		07				4				
John Bear's Paw				07		07				8		2	1	
Noah Dixon				07		04						2		
Sam Cecil				07		04				10		2		
John Two Young Men				07		04				2		2		
Paul Crawler				07		04				3		2		
Jonah Chiniquay				07								1		
Wm. Powder Face				07										
Mark Two Young Men				07		04				2		1		
John Big Woman				07						5				

Thomas Rolling Mud				·07		·04				5		2		P. L. GRASSE, Farmer.
Noah Cecil				·07										
Total		10		2·74		1·62				82		67	4	

RECAPITULATION.

A Band		22		4·18		1·49				152		43	25	P. L. GRASSE, Farmer.
B "		15		4·19		1·76				160		40		
C "		10		2·74		1·62				82		67	4	
Grand total		47		11·11		4·87				394		150	29	

Return showing Crops sown and harvested by individual Indians in Piegan Agency, season of 1895.

PIEGAN RESERVE, A.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.					Acres Harvested.					Remarks.
		Wheat.	Oats.	Potatoes.	Onions.	Gardens.	Wheat.	Oats.	Potatoes.	Onions.	Hay, tons.	
3	Chief White Cow	.....	2	·25	...	..	.....	16	20	.....	.....	
4	Dog Child	.....	.....	·50	.....	.....	.....	.....	45	.....	.....	
5	Crow Flag	.....	2	·50	....	·13	.....	15	45	..	.....	
14	Running Eagle	..	1	·25	.....	.....	.....	4	20	..	.....	
19	Otter Above	...	3	·50	.....	.....	.....	25	45	.....	.....	
20	Gopher	.....	....	·50	.....	·13	.....	.....	45	.....	.....	
31	Medicine Antelope	...	2	·25	.....	.....	.....	10	25	.....	.....	
45	Crow Shoe, M. C.	.....	.....	·50	.....	·13	.....	.....	45	.....	.....	
51	Man Who Travels	.....	.....	·25	.....	.....	.....	.....	35	.....	....	
74	Points Back	.....	....	·50	.....	·13	.....	.....	50	.....	.....	
	Total	.....	10	4·00	.....	·52	.....	70	375	.....	.....	

PIEGAN RESERVE, B.

7	Travelling	.....	1·00	·25	.....	·13	.....	6	30	.....	.....	
9	Little Wolf	.....	·50	·25	.....	.....	.....	5	25	.....	.....	
8	Sore Legs	.....	1·50	·50	.....	.....	.....	10	30	.....	.....	
15	War Bonnet	.....	3·00	·25	.....	·13	....	21	20	.....	.....	
29	Crow Round	.....	1·00	·50	.....	·13	.....	8	40	.....	.....	
32	Bull Plume, M. C.	....	3·00	·25	....	·13	.....	20	20	.....	.....	
	Total	.....	10·00	2·00	.....	·52	.....	70	165	.....	..	

PIEGAN RESERVE, C.

1	Big Sloan, M. C.	.....	3	·75	.....	·25	.....	15	90	.....	.....	
3	North Piegan	....	2	·25	.....	·13	.....	12	15	.....	.....	
7	Little Plume	....	4	·50	.....	.....	.....	35	40	.....	.....	
8	Many Chiefs	.....	2	·25	.....	·13	.....	15	20	.....	.....	
12	Manyan	.....	3	·75	.....	·13	.....	25	70	.....	.....	
14	The Crow	.....	2	·25	.....	.....	.....	13	20	.....	.....	

18	Pretty Face	2	·25		·13		16	25		
19	Big Bull	4	·25		·13		20	25		
20	Little Leaf	4	·50		·13		35	50		
35	Commodore	2	·25				10	20		
	Total	28	4·00		1·03		196	375		

PIEGAN RESERVE, D.

1	Running Wolf, M. C	2	1·00		·13		20	100		
2	Striped Eagle		·25		·13			25		
4	H. Potts	2	·25		·13		15	20		
7	Bear Bull	2	·25		·13		9	20		
9	Plain Eagle	2	·25		·13		6	15		
30	Plenty Robes	1	·50		·13		4	40		
31	Takes Enemies' Arms		·50		·13			40		
35	Striking With a Gun	3	·50		·13		30	50		
	Total	12	3·50		1·04		84	310		

PIEGAN RESERVE, E.

1	Crow Eagle, H. C	3·00	·25		·13		16	20		
2	Bad Boy	2·00	·50		·13		14	30		
9	Three Stars	2·00	·25				13	20		
13	Small Legs	2·50	·25				17	25		
15	Understands It	2·00	·25		·13		14	20		
17	Grassy Water	2·00	·25		·13		15	30		
18	Lost	3·00	·50		·13		28	40		
19	Crooked Tail	2·50	·50				16	35		
21	Black Eyes	2·00	·25		·13		15	25		
45	Wolf Robe	3·00	·75		·13		24	60		
53	Hair on His Face	2·00	·25		·13		10	20		
	Total	26·00	4·00		1·04		182	325		

RECAPITULATION.

	A	10	4·00		·52		70	375		Bands.
	B	10	2·00		·52		70	165		
	C	28	4·00		1·03		196	375		
	D	12	3·50		1·04		84	310		
	E	26	4·00		1·04		182	325		
	Total	86	17·50		4·15		602	1550		330

H. H. NASH,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Blood Agency, season of 1895.

BLOOD RESERVE, No. 148.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.						Bushels Harvested.						Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	
1	Bellows		1·50		·25		·13						Consumed during summer.	
1	Scabby Head		1·50		·25		·13							
1	Crooked Legs		2·00		·13		·13							
2	Man Talks		2·00		·25		·13				6			
3	Fire Steele		2·00		·25		·13				6			
3	Wolf Tail		2·00		·25		·13				6			
2	Red Tail Feathers				·13						4			
2	Hollering Among Them				·13						4			
4	Under Beaver		2·50		·13		·13							
4	Bad Bush				·13		·13							
4	Turns his Head				·13						6			
5	Little Ears				·25		·25							
4	Green Grass				·25		·13							
6	Blackwater				·25		·13				6			
6	Never-goes-out				·13		·07				4			
7	Crow Chief		1·50		·25		·13				6			
7	Bumble Bee		1·50		·25		·13				4			
8	Running Antelope	1·50	16·00	2·00	·50	·25	·13	20	70	20	10	10		
8	Shot Close				·50		·13				5			
3	Long White Eagle						·07							
9	Little Shield		2·00		·13		·13		15		6			
9	Plaited Hair		2·00		·13		·07		15		5			
10	Scabby Bull		2·00		·13		·13		8		8			
10	Little Shine		2·00		·13		·13		8		8			
10	Bottle						·13				6			
11	The Ox		1·50		·13						4			
12	Takes-a-gun-on-horseback		3·00	1·00	·13		·13				6			
12	Little Eyes		3·00		·13		·13		20		6			
13	Falling-over-a-bank		2·00		·25		·13		20		15			
13	Tallow		2·00		·13									
14	Sweet Grass	1·50	6·00	2·00	·50	·13	·25	15	50	20	20	10		
14	Piegan Frank				·13		·13				7			

15	Blackfoot Old Woman		5·00		·50	·13	·13		·50		10	10		
16	Mounted Horses				·13		·13				6			
17	Weazel Fat		1·00		·13		·13				6			
17	Wolf Robe				·13		·13				5			
18	Calf Shirt		2·00		·13		·13				8			
18	Running Funny		2·00		·25		·13		10		8			
18	White Calf Chief		2·00		·13		·13		10		8			
19	Owns-a-knife		1·00		·25		·25		15		18			
20	Red Deer	·50	2·00	·50	·25		·25				10			
21	Day Chief				·25		·13				10			
21	Yellow Bull				·25		·13				12			
21	Carries Something				·25		·13				8			
21	Spotted Eagle				·25		·13				9			
22	Shot Case	·50	1·50		·25		·25	8	22		12			
23	Hind Bull				·25		·13				11			
24	Eagle Shoe		2·00		·25		·25		28		15			
25	Eagle Speaker	·50	3·00	·50	·25		·25	9	42	10	18			
25	Flat Dagger				·25		·13				16			
26	Strangle Wolf				·25		·25				8			
27	No Runner		2·00	·50	·25		·25		32	8	15			
28	Takes Three Guns	·50	3·00	·50	·25		·25	10	45	12	20			
29	Standing Alone		2·00		·25		·25		15		7			
30	Bull Shield		2·00		·25		·13		12		9			
30	Low Horn		1·00		·25		·13		8		8			
30	Carries his tail				·25		·25				10			
31	Mike		2·00		·25		·25				12			
31	Crooked Ribs				·25		·25				10			
32	Home Farm		28·00	2·00	1·25		·50		766	40	130			
33	Bear down river		1·00		·13		·13		20		12			
34	The Rider		4·00		·13		·13		15		10			
35	Bull Young Man		2·00		·13		·13		18		14			
36	Many White Horses		1·50	1·00	·13		·13		16	6	10			
37	Red Crow	1·50	7·50		·25		·13	8	100		20			
37	Chief Moon				·13		·13				10			
37	Willie Red Crow				·13						12			
37	Running Sun				·13						8			
38	Big Old Man		2·00	1·50	·25		·13		35	10	22			
38	Takes the Gun Strong		1·00		·25		·13		8		10			
39	Big Wolf				·25		·13				8			
40	One Spot				·13						12			
41	Good Young Man		·75		·13				10		9			
42	Eagle Rib M. C		3·00		·13						15			
43	Melting Tallow				·25						24			
44	Running Wolf		6·00						25					
45	Many Chiefs	·50	1·50		·13		·13				16			
46	Rainy Chief	·25	1·50		·25		·13	5	12		20			
46	White Calf	·25			·13						6			
46	Morning Bird				·13						8			
	Carried forward	7·50	151·25	11·50	17·17	·51	10·45	75	1520	86	823	30		

Consumed during summer.

RETURN showing Crops sown and harvested by individual Indians in Blood Agency, season of 1895.

BLOOD RESERVE, No. 148.

Nos. of Pay Tickets.	Names of Indians.	ACRES SOWN.						BUSHELS HARVESTED.						Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	
	Brought forward	7·50	151·25	11·50	17·17	·51	10·45	75	1520	86	823	30	.....	
47	Weazel Eagle	.....	3·00	.....	·25	.....	·13	.....	45	.....	25	.....	.....	
47	Running Fisher	.....	.....	.....	·25	.....	·13	.....	.....	.....	15	.....	.....	
48	Dead Sarcee	.....	1·00	.....	·25	.....	·13	.....	15	.....	20	.....	.....	
49	Heavy Shield	.....	4·00	.....	·25	.....	·13	.....	12	.....	10	.....	.....	
49	Strangle Shield	.....	.....	.....	·13	.....	.....	.....	.....	.....	.....	.....	.....	
50	Small Leggings	.....	1·50	.....	·25	.....	·13	.....	20	.....	18	.....	.....	
51	Wolf Sitting	.....	3·00	.....	·25	.....	·13	.....	10	.....	12	.....	.....	
51	Spotted Eagle	.....	2·00	.....	·13	.....	·13	.....	20	.....	20	.....	.....	
51	Lizard Hips	.....	1·00	.....	·13	.....	·13	.....	8	.....	7	.....	.....	
52	Steel	.....	2·00	.....	·13	.....	·13	.....	.....	.....	.....	.....	.....	
52	Walking Around	.....	.....	.....	·13	.....	.....	.....	.....	.....	.....	.....	.....	
53	Red Beads	.....	·50	.....	·13	.....	.....	.....	13	.....	15	.....	.....	
53	Man They Talk About	.....	.....	.....	·13	.....	.....	.....	.....	.....	10	.....	.....	
53	Big Throat	.....	.....	.....	·13	.....	.....	.....	.....	.....	10	.....	.....	
53	Medicine Calf	.....	.....	.....	·13	.....	.....	.....	.....	.....	9	.....	.....	
53	Gamoose	.....	.....	.....	·13	.....	.....	.....	.....	.....	12	.....	.....	
53	Bob Tailed Chief	.....	.....	.....	·13	.....	·13	.....	.....	.....	10	.....	.....	
53	Many Mules	.....	.....	.....	·13	.....	·13	.....	.....	.....	8	.....	.....	
53	Many Bad Horses	.....	.....	.....	·13	.....	.....	.....	.....	.....	8	.....	.....	
53	Many Different Horses	.....	.....	.....	·13	.....	.....	.....	.....	.....	8	.....	.....	
53	Sitting Bull	.....	.....	.....	·13	.....	.....	.....	.....	.....	8	.....	.....	
54	Wolf Child	.....	3·00	.....	·50	.....	·50	.....	10	.....	20	.....	.....	
55	Wolf Bull	.....	3·50	.....	·25	.....	.....	.....	15	.....	8	.....	.....	
56	White-man-running-around	.....	2·50	.....	·13	.....	·13	.....	30	.....	10	.....	.....	
57	Tomorrow	.....	6·00	.....	·50	.....	·25	.....	.....	.....	.....	.....	.....	
58	Packing-his-tail	.....	1·00	.....	·25	.....	·13	.....	15	.....	12	.....	.....	
59	Bull Horn	1·00	4·00	.....	·50	.....	·25	10	60	.....	13	.....	.....	
60	Heavy Runner	.....	3·00	.....	·25	.....	.....	.....	30	.....	10	.....	.....	
61	Young Pine	.....	2·50	.....	·25	.....	.....	.....	25	.....	15	.....	.....	
62	Single Rider	.....	3·00	.....	·25	.....	·25	.....	35	.....	15	.....	.....	
63	Old Man	.....	2·50	.....	·50	.....	·25	.....	15	.....	20	.....	.....	
64	Pulling-up-grass	.....	3·00	.....	·25	.....	.....	.....	27	.....	11	.....	.....	

65	Looking Cross		2·00		25				20		9				
66	Prairie Chicken Old Man		2·50		13										
67	Spotted Eagle		2·00		25		13		25		7				
68	Sleeps-on-top		3·00		13				27						
69	Three Persons		2·00		25		25		25						
70	Long Time		2·50		25		50		30						
71	Crop Eared Wolf		6·00		50		75		70		20				
72	Calf Child		2·50		13				30		11				
73	Low Horn		2·00		25		13		30		20				
74	White-man-sleeps	1·50	7·00		50		25		84		25				
75	Black Plume		2·50		25		13		20						
76	Running Crane		4·50		50		13								
77	Big Snake		2·00		25		13		25		12				
78	Med. White Horses		3·00		25		25		40		14				
79	Striped Wolf		3·00		50		25		40		25				
80	Sullivan		3·00		50		13								
81	Eagle Child		6·00		50		25		60		25				
82	Left Hand		4·00		75		25		45		30				
83	White Buffalo Chief		4·50		25		13		46		10				
84	The Gambler		2·00		25		13		25		15				
85	Old Moon	1·00	4·00		50		25				17				
86	White Man Left		1·50		13				15		6				
	Total	11·00	274·75	11 52	31·50	51	17·68	85	2582	86	1426	30			

JAS. WILSON,
Indian Agent.

RETURN showing Crops sown and harvested by individual Indians in Carlton Agency, season of 1895.

WM. TWATT'S RESERVE, No. 101.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.						Bushels Harvested.								Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Gardens.	Hay, tons.	
1	Wm. Twatt	.....	.....	.....	1·00	.....	·25	.....	.....	.....	28	.....	.....	3	35	Mr. Richardson, the present farmer, was not appointed until after this crop was harvested.
47	Alex Badger	.....	.....	.....	·25	.....	·13	.....	.....	.....	15	.....	.....	.....	15	
13	Ni-kis-che-katch	2·00	2	.....	·50	.....	·13	.....	.....	.....	.....	.....	.....	.....	15	
4	Nee-shoo-egah-na-goos	2·50	.....	.....	·50	.....	·13	24	.....	.....	25	.....	.....	2	85	
8	See-seep	.....	.....	.....	·25	.....	·13	.....	.....	.....	.....	.....	.....	.....	.....	
41	Kah-wee-chy-may-tah-way-mat	2·00	.....	.....	·50	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	
36	Quays-kis-kummik	4·00	.....	.....	·25	.....	·25	7	.....	.....	12	.....	.....	2	35	
86	Wee-chee-hin	.....	.....	.....	·75	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	
32	Ka-nos-ka-wee-in-coo	3·00	.....	.....	1·00	.....	·13	24	.....	.....	37	.....	.....	.....	75	No. 25.—Very heavy crop on new land; did not ripen before frost.
9	Kai-sik-won-ayo	5·00	.....	.....	·25	.....	·13	20	.....	.....	.....	.....	.....	.....	20	
5	Thomas Ay-at-a-wayo	5·00	.....	.....	1·00	.....	·25	63	.....	.....	38	.....	.....	2	60	
80	Daniel	5·00	2	.....	·25	.....	·13	12	.....	.....	.....	.....	.....	.....	20	
83	Omee-nah-hoo-winin	1·50	.....	.....	·50	.....	·13	15	.....	.....	.....	.....	.....	1	.....	H. RICHARDSON, Farmer.
25	Na-na-tay-wan-pew	10·00	6	.....	1·00	.....	·25	.....	.....	.....	30	.....	.....	.....	50	H. KEITH, Indian Agent.
	Total	40·00	10	.....	8·00	.....	2·04	177	.....	.....	185	.....	.....	10	430	

PETAQUAKEY'S RESERVE, No. 102.

	Band (for seed)	.....	.....	.....	·50	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	Grain crop eaten by gophers. Up to end of July this crop looked very promising. The land was clear and free from weeds.
103	Sam Wolf	5	.....	2	·50	·25	·25	.....	.....	.....	13	.....	.....	1	24	
4	Isidore Wolf	.....	.....	.....	·50	.....	·25	.....	.....	.....	22	.....	.....	2	.....	
100	Okemow	5	.....	1	1·00	·25	·50	.....	.....	.....	38	2	.....	4	13	
110	Dan Wolf	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	
98	Antoine Wolf	3	.....	2	.....	.....	·25	.....	.....	.....	.....	.....	.....	.....	30	
109	Basil	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	
16	Manitokan	3	.....	.....	·50	.....	·25	.....	.....	.....	14	.....	.....	.....	.....	
85	Neeaneemiss	.....	.....	.....	·25	.....	·25	.....	.....	.....	8	.....	.....	2	18	
13	Long-neck and son	6	.....	.....	·25	·50	·25	.....	.....	.....	.....	8	.....	.....	35	
96	Lafond	8	2	3	1·00	·50	·50	.....	.....	.....	44	4	.....	3	34	
105	Paskokopaweein	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	H. KEITH, Indian Agent.
	Total	34	2	8	4·50	1·50	2·50	.....	.....	.....	159	14	.....	12	189	

95	Ambrose Wolf	1·7			2		1							3	25	
110	Baptiste	5·3		1	2		1				7				21	
115	Campbell	3·2			2		1				5			2	19	
24	J. Ledoux	10·5		1·4	3		1				5			10	35	
66	D. Okeemahsis	6·3			2		2				27			9	20	
29	Ayataskays	7·3			2		1				6			4	25	
22	John Duncan	10·1			3		1								40	
142	Waychan	9·7			4		1				5				45	
127	Dubois	7·0		2·3	5		2				12				36	
97	G. Dreever	12·5	7·6	4·5	5		2	8	66	29	8			3	50	
86	Thos. Muchahoo	8·2	1·2	2·6	3		1	4		12	4				35	
123	John Muchahoo	2·6			2		1	4							10	
83	Old Muchahoo				2						18					
124	Peter Muchahoo	4·4		1·8	1					3					23	
12	John Black	6·5		9	4		2	4		4	8			3	40	
99	Aiskahchass	2·4			2		1	3			20				10	
32	Duquette	8·4		2·5	6		1	36			11			5	26	
65	Wop-ah-soos	2·6	5·2		2		1	22						4	27	
	Band				1·7						50					
111	Massan				5		2				36			7	20	
136	W. Badger	8·6			2		1				16			2	25	
11	Jacob	1·5			1			3			8				17	
89	Lagraisse				1		1								28	
131	P. Badger	6·2			1		1				8			2	18	
14	Sakemow				1			11			5				5	
		125·00	14·00	17	8·0		2·5	95	66	48	259			54	600	

H. KEITH,
Indian Agent.

RETURN showing crops sown and harvested by individual Indians in Carlton Agency, season of 1895.

AHTAKAKOOP'S RESERVE, No. 104.

Nos. of Pay Tickets.	Names of Indians.	Acres Sown.						Bushels Harvested.								Remarks.
		Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Gardens.	Wheat.	Oats.	Barley.	Potatoes.	Turnips.	Carrots.	Gardens.	Hay—Tons.	
3	Pay-kee-koot	4·8	.....	.....	1·8	.....	.....	78	.....	.....	12	.....	.....	.....	30	
128	Isaac Mah-sis-kah-pud	1·4	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	40	
116	Alex. Sassa-kamoos	6·4	.....	1·0	.....	.....	.....	125	.....	12	.....	.....	.....	.....	28	
125	W. Cardinal	5·1	.....	1·9	·5	.....	.....	53	.....	16	16	.....	.....	.....	30	
126	Albert Snake	4·0	.....	.....	.....	.....	.....	108	.....	.....	18	.....	.....	.....	19	
137	Tah-wah-tah-pitta-ween	1·5	.....	.....	.....	.....	.....	19	.....	.....	.....	.....	.....	.....	33	
106	John Jimmick	15·2	.....	2·1	·3	.....	·3	78	.....	11	20	.....	.....	.....	48	
4	Meena-waw-chawk-way	5·1	.....	.....	·4	.....	.....	55	.....	.....	15	.....	.....	.....	33	
104	Simon	6·1	.....	.....	·2	.....	.....	47	.....	.....	.....	.....	.....	.....	37	
24	Ka-ma-asstotin	4·0	11·6	.....	1·0	.....	.....	50	109	.....	30	.....	.....	.....	52	
23 & 124	Kah-ka-soo and Norbert	16·2	1·4	2·7	·4	.....	·6	122	.....	16	12	50	5	½	37	
113	Grey eyes	2·7	.....	1·0	·5	.....	.....	32	.....	12	25	.....	.....	.....	50	
112	John Iman	8·2	5·0	1·9	·2	.....	·2	50	46	.....	10	.....	2	½	30	
129	Mayatis	4·4	.....	.....	.....	.....	.....	47	.....	.....	.....	.....	.....	.....	18	
22	Nay-nu-ka-sim	4·3	.....	.....	·2	.....	.....	37	.....	.....	6	.....	.....	.....	9	
39	Pee-wee-nis	8·2	.....	.....	·2	.....	·3	66	.....	.....	26	15	.....	1	38	
135	Kanahoowatum	4·3	.....	.....	·3	.....	.....	28	.....	.....	.....	.....	.....	.....	20	
100	Chicken	3·2	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	25	
102	Wos-ke-too-ey	2·2	.....	.....	·3	.....	·2	26	.....	.....	12	.....	.....	.....	14	
96	Baptiste	13·2	1·0	1·9	·3	.....	·2	78	20	38	55	25	6	1	25	*Oats and barley were seeded on other Indians' land.
5	*Wansayskoot	6·3	.....	.....	·5	.....	·3	204	20	37	28	10	3	.....	40	
98	Michel	6·3	.....	.....	·2	.....	.....	46	.....	.....	13	.....	.....	.....	30	
121	Rigesis and Soo-man-awuyo	5·9	.....	7	·5	.....	·3	219	10	15	68	30	.....	.....	33	
139	Jacob	3·0	.....	.....	·4	.....	·1	95	.....	.....	20	.....	.....	.....	25	
35	Way-mu-kos-awayo	3·0	.....	.....	.....	.....	.....	82	.....	.....	.....	.....	.....	.....	40	
115	Thos. Knife	10·3	.....	1·8	·7	.....	·1	135	.....	10	15	.....	.....	.....	15	
117	Jas. Knife	5·2	.....	.....	·4	.....	·2	68	.....	.....	12	10	.....	.....	43	
118	Peter G. Knife	1·5	.....	.....	.....	.....	.....	22	.....	.....	.....	.....	.....	.....	10	
138	Pay-murstick	.....	.....	.....	·2	.....	.....	.....	.....	.....	8	.....	.....	.....	10	
.....	Ayataskase	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	
127	Mac Pierre	8·7	.....	.....	.....	.....	·2	55	.....	.....	.....	.....	.....	.....	10	
120	Black Head	2·8	.....	.....	·3	.....	.....	51	.....	.....	20	.....	.....	.....	18	

131	Jumper	2 0	.....	.....	2	.....	.....	54	.....	.....	.....	.....	.....	.....	13	Louis Couture, Farmer. H. Keith, Indian Agent.
101	Mooko-man-aw-wayo	3·0	.....	.....	.....	.....	.....	60	.....	.....	.....	.....	.....	.....	30	
31	Levi	2·6	.....	.....	.....	.....	.....	45	.....	.....	.....	.....	.....	.....	18	
95	Matakam	2·4	.....	.....	.....	.....	.....	50	.....	.....	.....	.....	.....	.....	15	
	Total	183·5	19·0	15·0	10·0	.....	3·0	2320	205	167	441	140	16	3	972	

KENEMOTAYOO'S BAND.

	Band	.....	.....	.....	2	.....	.....	.....	.....	.....	108	.....	.....	.....	60	These Indians, having no reserve, live by hunting, raising only a few potatoes. H. Keith, Indian Agent.

SIOUX RESERVE, No. 94*a*.

	Band	20	5	.....	3	.....	1·75	290	90	.....	171	.....	.....	80	75	The Indians, who are newly settled on reserve, put in crop together this year. Next season, each man will work his own subdivision. H. Richardson, Farmer. H. Keith, Indian Agent.

PART II.

Department of Indian Affairs.

RETURN A (1)

Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895.

HEADQUARTERS—INSIDE SERVICE.

Name.	Rank.	Branch or Duties.	Annual Salary.	Date of Appointment to Department.	Date of First Appointment to Civil Service.
Hon. T. Mayne Daly	Superintendent General		$	Holds this office combined with that of Minister of the Interior.	
Hayter Reed	Dep'y Supt. General		3,200	Feb. 1, 1881	Feb. 1, 1881
Duncan C. Scott	Chief Clerk and Accountant		1,850	Oct. 8, 1880	Oct. 8, 1880
*E. L. Newcombe	Solicitor of Indian Affairs		400	Mar. 13, 1893	Mar. 13, 1893
W. A. Austin, D.L.S	1st Class Clerk	Technical	1,800	June 1, 1883	June 1, 1883
Allan N. McNeill	" "	Correspondence	1,800	July 1, 1874	July 1, 1874
John D. McLean	" "	Land and Timber	1,800	Oct. 1, 1876	Oct. 1, 1876
William McGirr	" "	Correspondence	1,800	June 14, 1883	June 14, 1883
Frederick W. Smith	" "	Accountant's	1,550	Sept. 1, 1873	Oct. —, 1870
Samuel Stewart	" "	Registry	1,550	July 1, 1879	July 1, 1879
John McGirr	" "	Statistics and Supply	1,550	July 1, 1883	Aug. 1, 1877
Robert G. Dalton	" "	Accountant's	1,450	July —, 1871	July —, 1871
William A. Orr	" "	Land and Timber	1,400	Nov. 24, 1883	Nov. 24, 1883
T. F. S. Kirkpatrick	2nd Class Clerk	Registry	1,400	Aug. 6, 1873	Aug. 6, 1873
Martin Benson	" "	School	1,400	April 1, 1876	April 1, 1876
Henry C. Ross	" "	Printing and Translation	1,400	Jan. 10, 1883	Jan. 10, 1883
Samuel Bray, D.L.S.	" "	Technical	1,400	June 14, 1884	June 14, 1884
Jas. A. J. McKenna	" "	Correspondence	1,400	Nov. 28, 1887	July 1, 1887
James J. Campbell	" "	" "	1,400	Dec. 30, 1886	Dec. 30, 1886
Edwin Rochester	" "	Accountant's	1,300	June 5, 1890	Jan. —, 1882
Hiram McKay	" "	"	1,100	Feb. 15, 1884	July 9, 1880
Henry J. Brook	3rd Class Clerk	"	1,000	Jan. 1, 1871	Jan. 1, 1871
Joseph Delisle	" "	Registry	1,000	June 23, 1880	June 23, 1880
Alfred E. Kemp	" "	Land and Timber	1,000	Feb. 1, 1884	Feb. 1, 1884
Fannie Yeilding	" "	Registry	1,000	April 3, 1882	April 3, 1882
John W. Shore	" "	Accountant's	1,000	Mar. 24, 1884	Mar. 24, 1884
Caroline Reiffenstein	" "	"	1,000	Nov. 24, 1883	Nov. 24, 1883
Louis A. Dorval	" "	Land and Timber	1,000	July 1, 1886	July 1, 1886
Lizzie D. McMeekin	" "	Accountant's	900	Dec. 31, 1887	Dec. 31, 1887
Ida H. Wilson	" "	Registry	850	Jan. 29, 1887	Jan. 29, 1887
George M. Matheson	" "	"	700	June 21, 1888	June 21, 1888
Edith H. Lyon	" "	Land and Timber	650	May 31, 1890	May 31, 1890
Helen G. Ogilvy	" "	" "	650	June 30, 1890	June 30, 1890
Floretta K. Maracle	" "	Accountant's	650	Jan. 31, 1891	Jan. 31, 1891
Robert B. E. Moffat	" "	Deputy Minister's Stenographer	650	Feb. 7, 1891	Feb. 7, 1891
Mary D. Maxwell	" "	Accountant's	600	May 31, 1890	May 31, 1890
Annie C. Taylor	" "	Typewriter	600	June 30, 1890	June 30, 1890
Frederick R. Byshe	" "	Registry	600	Mar. 26, 1891	Mar. 26, 1891
Louisa E. Dale	" "	"	600	July 21, 1891	July 21, 1891
James Guthrie	" "	"	550	July 21, 1891	July 21, 1891
Thomas P. Moffatt	" "	"	550	Oct. 14, 1891	Oct. 14, 1891
Alice M. S. Graham	" "	School	550	Nov. 28, 1893	Nov. 28, 1893
Frederick H. Byshe	" "	Accountant's	450	Feb. 6, 1893	Feb. 6, 1893
Emma S. Martin	" "	Land and timber	400	Sept. 11, 1894	Sept. 11, 1894
Benjamin Hayter	Packer	Statistics and Supply	460	July 26, 1892	July 26, 1892
Thomas Starmer	Messenger		500	July 1, 1883	July 1, 1883
William Seale	"		360	Mar. 18, 1893	Mar. 18, 1893

OFFICERS OF OUTSIDE SERVICE AT HEADQUARTERS.

J. C. Nelson, D.L.S.	In charge of Surveys of Indian Reserves in Manitoba, Keewatin, North-west Territories, and part of Ontario formally called "disputed territory."	2,190	June 14, 1883	June 14, 1883
Jas. Ansdell Macrae	Inspector of Indian Agencies and Reserves	1,400	June 14, 1881	June 14, 1881
Geo. L. Chitty	Inspector of Timber	1,000	June 21, 1893	June 21, 1893

*Also Deputy Minister of Justice.

RETURN A (2)

Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895.

OUTSIDE SERVICE.

ONTARIO.

Name.	Office.	Annual Salary.	Address.	Remarks.
		$ cts.		
Wm. Van Abbott...	Indian Lands Agent.	825 00	Sault Ste. Marie..	With $154.50 a year for office rent and fuel.
Wm. Bateman.....	Indian Agent.....	100 00	Port Perry.....	
John Beattie.....	"	500 00	Highgate.....	
Edmund Bennett ...	"	60 00	Castile.....	
Chas. J. Blomfield..	Indian Lands Agent.	.....	Lakefield.....	7½ per cent commission on collections.
Edwin D. Cameron .	Indian Supt.....	1,200 00	Brantford.....	With commission of 5 per cent on collections on land sales, $140 a year travelling expenses, and $200 for house and office rent.
Alex. B. Cowan.....	Indian Lands Agent.	250 00	Gananoque.....	
John Crowe.....	Indian Agent.....	500 00	Chippewa Hill.....	
John P. Donnelly...	"	800 00	Port Arthur	With $130 a year for rent, light and fuel.
Wm. Geo. Egar	"	500 00	Deseronto.....	
Adam English.....	"	500 00	Sarnia.....	
Samuel Hagan.....	Indian Lands Agent.	.....	Thessalon.....	5 per cent on collections up to $2,000, and 2½ per cent on collections in excess of that sum.
Alex. M. Ironside...	Clerk and Interpreter	720 00	Manitowaning	With free house.
John W. Jermyn....	Indian Agent.....	500 00	Cape Croker.....	"
Peter E. Jones, M.D.	"	600 00	Hagersville.....	
Alex. McKelvey....	"	500 00	Wallaceburg.....	With $60 a year for rent.
Duncan J. McPhee.	"	750 00	Atherley.....	
Wm. H. Price.....	Indian Lands Agent.	600 00	Gore Bay.....	With 5 per cent on collections up to $2,000, and 2½ per cent on collections in excess of that amount.
Benjamin W. Ross..	Indian Supt.....	800 00	Manitowaning....	With 5 per cent on collections up to $2,000, and 2½ per cent on sums in excess of that amount.
Wm. Simpson.....	Indian Lands Agent.	.....	Wiarton.....	5 per cent on collections up to $2,000, and 3½ per cent on collections in excess of that amount; and free office.
Alex. G. Smith.....	Clerk	900 00	Brantford.....	
John Thackeray	Indian Agent.....	650 00	Roseneath.....	
John G. Wallace....	Guardian of Islands.	25 00	Ivy Lea.....	
Thos. S. Walton, M.D	Indian Supt.....	900 00	Parry Sound.....	With 5 per cent on collections, and $60 a year for office rent.
Ebenezer P. Watson.	Indian Lands Agent.	.....	Sarnia.....	5 per cent on collections.

Department of Indian Affairs.

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895.

OUTSIDE SERVICE.

QUEBEC.

Name.	Office.	Annual Salary.	Address.	Remarks.
		$ cts.		
Antoine O. Bastien..	Indian Agent.....	200 00	Jeune Lorette....	
Alex. Brosseau.....	"	600 00	Caughnawaga.....	With $60 a year for office rent.
C.O.H.Desilets, M.D	"	100 00	Bécancourt.....	
Rev. Jacob Gagné ..	"	50 00	Maria	
Narcisse LeBel	"	150 00	Cacouna.....	With 5 per cent commission on land sales up to $2,000, and 2½ per cent on collections in excess of that amount.
George Long.....	"	.....	St. Regis.....	10 per cent commission on collections; 2½ per cent on disbursements. No other remuneration.
A. McBride.....	"	50 00	N. Temiscamingue	
James Martin.....	"	600 00	Maniwaki	With $50 a year for office rent.
A. A. Mondou, N.P.	"	200 00	Pierreville.....	
Ladislas E. Otis	"	400 00	Pointe Bleue.....	
V. J. A. Venner, M.D	"	200 00	Campbellton, N.B.	

MISSIONARIES receiving remuneration from the Department of Indian Affairs for services to Indians during Fiscal Year ended 30th June, 1895.

ONTARIO AND QUEBEC.

Name.	Address.	Annual Salary.	Denomination.	Remarks.
		$ cts.		
Rev. G. A. Anderson	Deseronto	400 00	Church of England	Paid by the Mohawks of the Bay of Quinté.
Rev. G. Giroux.....	Lorette.....	225 96	Roman Catholic...	Missionary to the Hurons of Lorette.
Rev. John Jacobs...	Baby's Point.....	400 00	Church of England	Missionary to the Chippewas of Walpole Island.
Rev. M. Mainville..	St. Regis.....	303 32	Roman Catholic...	Of this allowance $100 and an additional amount of $25 for fuel are paid by the Iroquois of St. Regis.
Rev. J. M. Roy	Pierreville.....	235 00	" ...	Missionary to the Abenakis of St. Francis.
Rev. A. G. Smith...	Munceytown.....	400 00	Church of England	Missionary to the Chippewas of the Thames.
Rev. John Tucker...	Pierreville.....	140 00	" ..	Missionary to the Abenakis of St. Francis.

Return A (2)—Medical Men employed by the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895, showing the Bands that they attend.

Outside Service.

ONTARIO AND QUEBEC.

Name.	Name of Band Attended.	Annual Salary.	Remarks.
		$	
Geo. Bowman	Chippewas of Beausoleil	150	Salary paid by the band.
G. H. Corbett	" Rama	150	"
R. M. Fisher	" Nawash	350	"
W. H. Howey	Whitefish Lake Indians	300	"
P. E. Jones	Mississaguas of the Credit	250	"
J. A. Langrill	Six Nations	2,000	"
W. F. Langrill, Asst.	"	850	"
T. Clark Lapp	Mississaguas of Alnwick	275	"
Jas. A. McEwan	Oneidas of the Thames	300	Salary voted by parliament.
Delaski Marr	Moravians of the Thames	300	Salary paid by the band.
Geo. Mitchell	Walpole Island Indians	500	"
E. A. Mulligan	River Desert Indians	200	"
John Newton	Mohawks of the Bay of Quinté	250	"
J. A. Reid	Garden River and Batchewana	100	"
P. J. Scott	Chippewas of Saugeen	260	"
J. M. Shaw	Mississaguas of Rice Lake	150	"
D. Sinclair	Chippewas and Munsees of the Thames	260	The Chippewas pay $200, and $60 is voted by parliament.
N. C. Smillie	Micmacs of Gaspé	80	Salary paid from province of Quebec fund.
R. M. Stephen	Tribes on Manitoulin Island	1,000	Salary paid by the band. Allowed $150 additional for rent.
V. J. A. Venner	Micmacs of Restigouche	100	Salary paid from province of Quebec fund.
G. A. Whiteman	Mohawks of the Bay of Quinté	250	Salary paid by the band.

Return A (2) Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895.

Outside Service.

NOVA SCOTIA.

Name.	Office.	Annual Salary.	Address.	Remarks.
		$ cts.		District—
Chas. E. Beckwith	Indian Agent	50 00	Steam Mills	No. 2, King's County.
Rev. Thos. J. Butler	"	100 00	Caledonia	3, Queen's " / 4, Lunenburg "
Rev. A. Cameron, D.D.	"	100 00	Christmas Island	13, Cape Breton County.
John E. Campbell	"	50 00	Baddeck	12, Victoria "
Rev. J. C. Chisholm	"	100 00	St. Peters, C.B.	10, Richmond "
Wm. C. Chisholm	"	100 00	Heatherton	9, Antigonish and Guysboro' Counties.
J. J. E. de Molitor	"	50 00	Shelburne	15, Shelburne County.
James Gass	"	50 00	Shubenacadie	6a Hants "
Rev. R. McDonald	"	100 00	Eureka	8, Pictou "
F. McDormand	"	50 00	Bear River	1b Digby "
Rev. D. McIsaac	"	100 00	Glendale, River Inhabitants.	11, Inverness "
D. H. Muir, M.D.	"	50 00	Truro	6b Colchester County,
Rev. D. O'Sullivan	"	50 00	Sheet Harbour	5, Halifax County.
F. A. Rand, M.D.	"	50 00	Parrsboro'	7, Cumberland County.
Geo. R. Smith	"	50 00	Yarmouth	14, Yarmouth "
Geo. Wells	"	50 00	Annapolis	1a Annapolis "
M. A. McDonald, M.D.	Medical Officer	100 00	Sydney	13, Cape Breton "
J. McMillan, M.D.	"	75 00	Pictou	8, Indians of Pictou and vicinity.

Department of Indian Affairs.

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895—*Continued.*

OUTSIDE SERVICE.

NEW BRUNSWICK.

Name.	Office.	Annual Salary.	Address.	Remarks.
		$ cts.		
Wm. D. Carter	Indian Supt	400 00	Richibucto	North-eastern superintendency.
Jas. Farrell	"	300 00	Fredericton	South-western "
"	Acting Supt	200 00		Victoria and Madawaska Counties. Allowed $50 a year for office, also actual travelling expenses.
Rev. E. J. Bannon	Missionary	100 00	Big Cove	
Rev. L. C. D'Amour	"	40 00	Edmundston	
Rev. J. P. Kiernan	"	100 00	St. Mary's	
Rev. W. Morrisey	"	100 00	Oak Point	
Rev. M. A. O'Keeffe	"	100 00	Tobique	
Rev. W. O'Leary	"	100 00	Kingsclear	
J. W. Begg, M.D	Medical Officer	25 00	Dalhousie	
J. S. Benson, M.D	"	100 00	Chatham	Northumberland County.
H. A. Fish, M.D	"	100 00	Newcastle	" "
W. G. King, M. D	"	20 00	Tobique	
R. A. Olloqui, M.D	"	100 00	Big Cove	Kent County.
J. C. Vanwart, M.D	"	200 00	Tobique	
John Simon	Constable	20 00	Eel Ground	Northumberland County.
Peter Pennais	"	24 00	"	

PRINCE EDWARD ISLAND.

John O. Arsenault	Indian Supt	300 00	Higgins Road	Salary as superintendent $200; allowance for travelling expenses, $100.
Assimir J. Poirier	Teacher	300 00	"	

BRITISH COLUMBIA.

Arthur W. Vowell	Indian Superintendent for British Columbia	3,000 00	Victoria	
Joseph W. Mackay	Senior Clerk	1,800 00	"	
Wm. B. McLaughlin	Clerk	900 00	"	
J. Cameron	Messenger	600 00	"	
Peter O'Reilly	Indian Reserve Commissioner	3,500 00	"	
Ashdown H. Green	Surveyor	1,800 00	"	
Ewen Bell	Indian Agent	900 00	Clinton	
Frank Devlin	"	1,200 00	New Westminster	
R. L. T. Galbraith	"	900 00	Fort Steele	
Harry Guillod	"	1,200 00	Alberni	
Wm. H Lomas	"	1,200 00	Quamichan	
Richard E. Loring	"	1,100 00	Hazelton	
Richard H. Pidcock	"	1,200 00	Alert Bay	
Chas. Todd	"	1,800 00	Metlakahtla	
Wentworth F. Wood	"	1,200 00	Kamloops	
Jas. Langley	Engineer on steamer "Vigilant"	900 00	Metlakahtla	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895—*Continued.*

OUTSIDE SERVICE.

NORTH-WEST TERRITORIES, MANITOBA AND KEEWATIN.

Name.	Office.	Annual Salary.	Address.	Remarks.
	COMMISSIONER'S OFFICE, REGINA.	$ cts.		
A. E. Forget	Assist. Indian Commissioner	2,400 00	Regina	
T. P. Wadsworth	Chief Inspector of Indian Agencies and Reserves	2,200 00	"	
Alex. McGibbon	Inspector of Indian Agencies and Reserves	2,200 00	"	
A. W. Ponton, D.L.S.	Assist. Surveyor	1,400 00	"	
G. A. Betournay	Inspector of Roman Catholic Indian Schools	1,200 00	"	
W. B. Pocklington	Storekeeper	1,300 00	"	
F. H. Paget	Clerk	1,300 00	"	
J. A. Mitchell	"	1,200 00	"	
J. W. Jowett	"	1,000 00	"	
A. W. L. Gompertz	"	900 00	"	
A. P. Vankoughnet	"	900 00	"	
S. Swinford	"	900 00	"	
E. C. Stewart	"	840 00	"	
J. R. Marshallsay	"	720 00	"	
T. J. Fleetham	"	720 00	"	
J. R. C. Honeyman	"	720 00	"	
W. Graham	"	720 00	"	
N. Campbell	"	480 00	"	
D. N. McLachlan	"	420 00	"	
A. H. Lock	"	360 00	"	
D. McAra	"	360 00	"	
Peter Hourie	Interpreter	900 00	"	
G. S. Collier	Caretaker	420 00	"	
J. K. McCallum	Messenger	420 00	"	
Mrs. Jane Quinn	Pensioner	144 00	"	
	SUPERINTENDENT'S OFFICE, WINNIPEG.			
E. McColl	Inspector of Indian Agencies, in charge of Manitoba Superintendency	2,400 00	Winnipeg	
L. J. A. Lévêque	Clerk	1,400 00	"	
G. Emile Jean	"	900 00	"	
A. McLean	"	300 00	"	
Michael Fee	Caretaker	250 00	"	
G. T. Orton, M.D.	Medical Officer	800 00	"	Attends Indians of St. Peter's, Fort Alexander and Broken Head River Reserves.
	MANITOBA SUPERINTENDENCY.			
	Treaty No. 1.			
F. Ogletree	Indian Agent	1,050 00	Portage la Prairie.	
A. M. Muckle	"	900 00	Clandeboye	
	Treaty No. 2.			
H. Martineau	Indian Agent	1,000 00	Manitoba House	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895—*Continued.*

OUTSIDE SERVICE.

NORTH-WEST TERRITORIES, MANITOBA AND KEEWATIN—*Continued.*

Name.	Office.	Annual Salary.	Address.	Remarks.
	Treaty No. 3.			
R. J. N. Pither	Indian Agent	1,000 00	Rat Portage	
F. C. Cornish	"	1,000 00	Fort Frances	
J. McIntyre	"	900 00	Savanne	
Thos. Hanson, M.D.	Medical Officer	700 00	Rat Portage	
W. W. Birdsall, M.D	"	450 00	Fort Frances	
	Treaty No. 5.			
Angus McKay	Indian Agent	1,000 00	Grand Rapids, Berens River	
Joseph Reader	"	1,000 00	The Pas	
	NORTH-WEST SUPERINTENDENCY.			
	Treaty No. 4.			
	BIRTLE AGENCY.			
J. A. Markle	Indian Agent	1,200 00	Birtle	
S. M. Dickenson	Clerk	720 00	"	
W. Nabbis	Interpreter	420 00	"	
	SWAN RIVER AGENCY.			
W. E. Jones	Indian Agent	1,200 00	Côté	
F. Fisher	Clerk and Farmer	720 00	"	
W. Thomas	Labourer	180 00	"	
	MOOSE MOUNTAIN AGENCY.			
John J. Campbell	Indian Agent	1,200 00	Cannington Manor	
H. R. Halpin	Clerk	720 00	"	
C. Lawford	Farmer	600 00	"	
W. Murison	Interpreter	360 00	"	
	CROOKED LAKES AGENCY.			
A. McDonald	Indian Agent	1,400 00	Broadview	
D. Pierce	Clerk	720 00	"	
J. A. Sutherland	Farmer	600 00	"	
M. Calder	"	420 00	"	
Jas. Pollock	"	420 00	"	
Isaac Pollock	"	420 00	"	
Henry Cameron	Interpreter	300 00	"	
T. Gopher	Mail Carrier	60 00	"	
	FILE HILLS AGENCY.			
A. J. McNeill	Acting Indian Agent	800 00	Qu'Appelle	
Wm. McNab	Farmer & Interpreter	360 00	"	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895—*Continued.*

OUTSIDE SERVICE.

NORTH-WEST TERRITORIES, MANITOBA AND KEEWATIN—*Continued.*

Name.	Office.	Annual Salary.	Address.	Remarks.
	MUSCOWPETUNG'S AGENCY.	$ cts.		
J. B. Lash	Indian Agent	1,200 00	Regina	
W. Anderson	Clerk	720 00	"	
S. Hockley	Farmer	600 00	"	
J. H. Gooderham	"	600 00	"	
J. Nicol	"	480 00	"	
J. D. Finlayson	Herder	480 00	"	
John Larocque	Interpreter	360 00	"	
M. M. Seymour, M.D	Medical Officer	600 00	"	Also receives $600 for attendance Qu'Appelle Industrial School.
	TOUCHWOOD HILLS AGENCY.			
J. P. Wright	Indian Agent	1,000 00	Kutawa	
H. A. Carruthers	Clerk	800 00	"	
Thos. E. Baker	Farmer	480 00	"	
E. Stanley	"	420 00	"	
W. Lambert	"	360 00	"	
Chas. Favel	Labourer	360 00	"	
Geo. McNab	Interpreter	300 00	"	
Thos. Green	"	60 00	"	
	ASSINIBOINE AGENCY			
W. S. Grant	Indian Agent	1,200 00	Indian Head	
J. C. Halford	Farmer	480 00	"	
"Jack's Son"	Mail Carrier	60 00	"	
	DUCK LAKE AGENCY.			
R. S. McKenzie	Indian Agent	1,100 00	Stobart	
W. Sibbald	Clerk	720 00	"	
Jos. H. Price	Farmer	600 00	"	
Louis Marion	"	480 00	"	
Lawrence Lovell	"	480 00	"	
John H. Gordon	"	480 00	"	
Sandy Thomas	Interpreter	420 00	"	
A. B. Stewart, M.D.	Medical Officer	100 00	"	
	CARLTON AGENCY.			
Hilton Keith	Indian Agent	1,200 00	Aldina	
H. W. Halpin	Clerk	480 00	"	
W. Giles	Miller and Blacksmith	660 00	"	
Louis Couture	Farmer	600 00	"	
A. J. Coburn	"	300 00	"	
Rupert Pratt	Interpreter	420 00	"	
	SIOUX.			
R. W. Scott	Farmer, Oak River	480 00	Griswold	
W. R. Tucker	Overseer and Issuer, Moose Woods	144 00	Saskatoon	
	BATTLEFORD AGENCY			
P. J. Williams	Indian Agent	1,200 00	Battleford	
Justus Willson	Farmer	480 00	"	
F. A. D. Bourke	"	360 00	"	
P. Tomkins	"	360 00	"	
S. Warden	"	360 00	"	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895—*Continued.*

OUTSIDE SERVICE.

NORTH-WEST TERRITORIES, MANITOBA AND KEEWATIN—*Continued.*

Name.	Office.	Annual Salary.	Address.	Remarks.
	BATTLEFORD AGENCY —*Continued.*			
R. Mair	Farmer	360 00	Battleford	
Wm. Smith	Teamster	480 00	"	
Peter Taylor	Labourer	360 00	"	
S. T. Macadam, M.D	Medical Officer	750 00	"	
	ONION LAKE AGENCY			
G. G. Mann	Indian Agent	1,200 00	Onion Lake	
John Carney	Storekeeper	720 00	"	
John Bangs	Farmer and Interpreter	360 00	"	
Joseph Taylor	Millwright	60 00	"	
	SADDLE LAKE AGENCY.			
John Ross	Indian Agent	1,200 00	Pakan	
G. H. Harpur	Clerk	420 00	"	
Chas. de Gear	Farmer	420 00	"	
Norman McDonald	Interpreter	300 00	"	
	EDMONTON AGENCY.			
Chas. de Cazes	Indian Agent	1,200 00	Edmonton	
A. E. Lake	Clerk	720 00	"	
W. J. O'Donnell	Farmer	600 00	"	
John Foley	Farmer and Interpreter	420 00	"	
	HOBBEMA AGENCY.			
D. L. Clink	Indian Agent	1,200 00	Hollbrooke	
C. J. Johnson	Clerk	720 00	"	
A. E. Moore	Farmer	360 00	"	
Gilbert Whitford	Interpreter	360 00	"	
R. Beer	Labourer	300 00	"	
	Treaty No. 7.			
	SARCEE AGENCY.			
S. B. Lucas	Indian Agent	1,200 00	Calgary	
A. Kemeys-Tynte	Clerk	720 00	"	
P. L. Grasse	Farmer	600 00	Morley	
Geo. Hodgson	Interpreter	420 00	Calgary	
"The Sarcee"	Scout	120 00	"	
Tom Godin	Assistant Issuer	60 00	"	
	BLACKFOOT AGENCY.			
Magnus Begg	Indian Agent	1,400 00	Gleichen	
J. Lawrence	Clerk	900 00	"	
W. M. Baker	Farmer	600 00	"	
G. H. Wheatley	"	540 00	"	
Thos. Scott	Interpreter	420 00	"	
Thos. Lauder	Issuer	360 00	"	
Kitchips	Teamster	180 00	"	
"Old-Woman-at-War"	Scout	120 00	"	
Jas. Appikokie	"	120 00	"	

Return A (2)—Of Officers and Employees of the Department of Indian Affairs for the Fiscal Year ended 30th June, 1895—*Concluded.*

Outside Service.

NORTH-WEST TERRITORIES, MANITOBA AND KEEWATIN—*Concluded.*

Name.	Office.	Annual Salary.	Address.	Remarks.
	Blood Agency.			
James Wilson.	Indian Agent.	1,100 00	Macleod	
C. W. H. Sanders	Clerk	900 00	"	
Ed. McNeil	Farmer	480 00	"	
A. E. Jones	"	360 00	"	
F. D. Freeman	Issuer	540 00	"	
D. Mills	Interpreter	480 00	"	
C. H. Clarke	Labourer	420 00	"	
"Heavy Head"	Mail Carrier	120 00	"	
"Running Crane"	Scout	120 00	"	
"Bobtailed Dog"	"	120 00	"	
Sister St. Eusèbe	Hospital Nurse	75 00	"	
Sister Z. St. Louis	"	75 00	"	
F. X. Girard, M.D	Medical Officer	1,000 00	"	
	Piegan Agency.			
H. H. Nash	Indian Agent	1,000 00	Macleod	
Geo. F. Maxfield	Clerk and Issuer	480 00	"	
J. W. Smith	Farmer	420 00	"	
W. H. Cox	Issuer	420 00	"	
H. Dunbar	Interpreter	420 00	"	
"North Piegan"	Scout	120 00	"	
"Plenty Robes"	"	120 00	"	
"Dog's Head"	Assistant Issuer	78 00	"	
"Take-enemies-arms"	Mail Carrier	60 00	"	

Department of Indian Affairs.

RETURN B (1)—INDIANS OF NOVA SCOTIA.

—		Grant.	Expenditure.	Grant not used.	Grant Exceeded.
		$ cts.	$ cts.	$ cts.	$ cts.
Salaries under 57 Vic., c. 2		1,200 00	1,200 00		
Relief and seed grain under 57 Vic., c. 2		3,000 00	2,070 83	929 17	
Medical attendance and medicines under 57 Vic., c. 2	$2,000 00				
Medical attendance and medicines under 58 Vic., c. 2	1,000 00				
		3,000 00	2,997 23	2 77	
Miscellaneous under 57 Vic., c. 2	250 00				
" " 58 " "	319 25				
		569 25	513 53	55 72	
		7,769 25	6,781 59	987 66	

RETURN B (2)—INDIANS OF NEW BRUNSWICK.

—		Grant.	Expenditure.	Grant not used.	Grant Exceeded.
		$ cts.	$ cts.	$ cts.	$ cts.
Salaries under 57 Vic., c. 2		1,705 00	1,703 95	1 05	
Relief and seed grain under 57 Vic., c. 2		2,700 00	2,699 14	0 86	
Medical attendance and medicines under 57 Vic., c. 2	$1,295 00				
Medical attendance and medicines under 58 Vic., c. 2	700 00				
		1,995 00	1,981 04	13 96	
Miscellaneous under 57 Vic., c. 2		300 00	279 06	20 94	
		6,700 00	6,663 19	36 81	

RETURN B (3)—INDIANS OF PRINCE EDWARD ISLAND.

—	Grant.	Expenditure.	Grant not used.	Grant Exceeded.
	$ cts.	$ cts.	$ cts.	$ cts.
Salaries under 57 Vic., c. 2	300 00	300 00		
Relief and seed grain under 57 Vic., c. 2	1,125 00	777 82	347 18	
Medical attendance and medicines under 57 Vic., c. 2	350 00	346 48	3 52	
Miscellaneous under 57 Vic., c. 2	75 00	9 30	65 70	
	1,850 00	1,433 60	416 40	

RETURN B (4)—INDIANS OF MANITOBA AND THE NORTH-WEST TERRITORIES.

—	Grant.	Expenditure.	Grant not used.	Grant Exceeded.
	$ cts.	$ cts.	$ cts.	$ cts.
Annuities and commutations under 57 Vic., c. 2....	128,575 00	122,180 00	6,395 00	
Implements and tools under 57 Vic., c. 2.....	9,481 00	9,473 24	7 76	
Field and garden seeds " " "	4,200 00	4,191 85	8 15	
Live stock " " "	7,001 00	6,674 71	326 29	
Supplies for destitute " " "	216,093 00	215,416 91	676 09	
Triennial clothing " " "	5,182 00	4,299 22	882 78	
Day, boarding and industrial school, under 57 Vic., c. 2.....	233,400 00	230,160 58	3,239 42	
Surveys under 57 Vic., c. 2.....	4,000 00	3,888 42	111 58	
Farm wages " " "	24,713 00	24,254 09	458 91	
Farm maintenance " " "	11,484 00	11,405 48	78 52	
Sioux " " "	4,597 00	4,597 00	.....	
Buildings " " "	5,953 00	5,842 20	110 80	
General expenses " " "	114,256 00	114,250 52	5 48	
Grist and saw-mills " " "	4,471 00	4,471 00	.....	
	773,406 00	761,105 22	12,300 78	

RETURN B (5)—INDIANS OF BRITISH COLUMBIA.

—	Grant.	Expenditure.	Grant not used.	Grant exceeded.
	$ cts.	$ cts.	$ cts.	$ cts.
Salaries under 57 Vic., c. 2.....	19,140 00	17,505 61	1,634 39	
Relief of distress under 57 Vic., c. 2.....	5,000 00	4,664 57	335 43	
Seed, implements and tools under 57 Vic., c. 2.....	1,700 00	1,595 25	104 75	
Medical attendance and medicines under 57 Vic., c. 2.....$ 6,000 00				
Medical attendance and medicines under 58 Vic., c. 2 ..... 4,000 00				
	10,000 00	9,995 62	4 38	
Day and Boarding Schools under 57 Vic., c. 2.....	10,000 00	6,340 13	3,659 87	
Industrial Schools do	43,200 00	35,532 70	7,667 30	
Travelling expenses do	5,000 00	4,405 31	594 69	
Office and miscellaneous expenses do	4,400 00	3,372 28	1,027 72	
Steamer "Vigilant" expenses do	2,000 00	2,000 00	.....	
Surveys under 57 Vic., c. 2.....$ 9,672 00				
do 58 do 500 00				
	10,172 00	10,167 00	5 00	
Reserve Commission under 57 Vic., c. 2.....	8,000 00	5,957 53	2,042 47	
	118,612 00	101,536 00	17,076 00	

RETURN B (6)—INDIANS OF ONTARIO AND QUEBEC.

No. of account.	—	Grant.	Expenditure.	Grant not used.	Grant exceeded.
		$ cts.	$ cts.	$ cts.	$ cts.
78	Surveys	1,000 00	608 20	391 80	
86	Relief of distress in Ontario	800 00	842 08	.....	42 08
87	Blankets	1,600 00	1,600 00	.....	
88	Removal of Lake Two Mountain Indians	1,000 00	25 60	974 40	
89	Travelling Expenses	600 00	600 00	.....	
111	Relief of distress and purchase of seed grain	4,500 00	4,564 32	.....	64 32
118	Purchase of Islands Nos. 82 & 83 Stony Lake from Messrs. Strickland and Burnham	228 20	228 20	.....	
119	Legal Expenses	350 00	325 29	24 71	
128	Schools	30,862 50	30,816 91	45 59	
136	Salaries	2.550 00	2,550 00	.....	
139	Grant to Muncey Agricultural Society	90 00	90 00	.....	
144	Annuities, Robinson Treaty	17,806 00	17,806 00	.....	
145	Repairs to Buildings	75 00	74 77	0 23	
205	Repairs to Roads Bridges and Building School-house Caughnawaga Reserve	3,500 00	3,390 73	109 27	
207	Bonnechere Bridge	200 00	200 00	.....	
208	A. C. MacRae for overpayment on Lots 24 & 25 Con. 9, Gordon	162 07	162 07	.....	
	Grant to assist Indian Land Management Fund, Province of Quebec Account and Indian School Fund Account	14,000 00	14,000 00	.....	
		79,323 77	77,884 17	1,546 00	106 40

HAYTER REED,
Deputy Supt. Gen. of Indian Affairs.

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, 30th June, 1895.

D. C. SCOTT,
Accountant.

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INDIAN TRUST FUND.

Return C with Subsidiary Statements showing transactions in connection with the Fund during the year ended 30th June, 1895.

	$ cts.	cts.
Balance on 30th June, 1894		3,539,943 22
Collections on account of land sales, timber and stone dues, rents, fines and fees		108,317 18
Interest accrued during the year on funds in hands of the Dominion Government		160,635 04
Outstanding cheques		25 36
Grants by Parliament to supplement the fund		31,806 00
Expenditure during the year	246,520 60	
Balance on 30th June, 1895	3,594,206 20	
	3,840,726 80	3,840, 726 80

HAYTER REED,
Deputy Supt. Gen. of Indian Affairs.

Department of Indian Affairs,
Ottawa, 30th June, 1895.

D. C. Scott,
Accountant.

Batchewana Indians, Ont. (No. 1)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
Capital.	$ cts.	$ cts.
By Balance on 30th June, 1894		10,978 04
Land and timber sales		2,552 56
To Percentage on collections carried to credit of Indian Land Management Fund	255 26	
Balance on 30th June, 1895	13,275 34	
	13,530 60	13,530 60
By Balance on 30th June, 1895, brought down		13,530 60
Interest.		
By Balance on 30th June, 1894		512 15
Wm. Van Abbott, refund of interest sent for distribution		25 86
Interest on invested capital		402 16
Rents		588 00
To Nubenagooching, chief, salary from 1st April, 1894, to 31st March, 1895	100 00	
Rev. V. Artus, teacher, salary 1st April, 1893, to 31st March, 1894	200 00	
J. B. Ahguhbsonquai, Ratkobshing, Showonebeness, Lapoint, Oquais and Kuratahgiwik, interest for ½ year, 30th September, 1895	18 60	
Wm. Van Abbott, arrears of interest for fall, 1893, due absentees	14 88	
Wm. Van Abbott, interest for distribution	450 00	
Angelique Boyer, relief grant	5 00	
Mishkeosh, "	5 00	
Mishkeosh, "	5 00	
Percentage of collections carried to credit of Indian Land Management Fund	35 28	
Balance on 30th June, 1895	694 41	
	1,528 17	1,528 17
By Balance on 30th June, 1895, brought down		694 41

Department of Indian Affairs

Chippewas of Beausoleil, Ont. (No. 2)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance on 30th June, 1894		55,546 38
Land sales and timber dues		100 50
To Percentage on collections carried to the credit of Indian Land Management Fund	10 03	
Balance on 30th June, 1895	55,636 85	
	55,646 88	55,646 88
By Balance on 30th June, 1895, brought down		55,636 85
INTEREST.		
By Balance on 30th June, 1894		807 47
Interest on invested capital		2,658 40
Refund of interest moneys		150 20
To Interest for distribution	2,693 90	
Mary Assance, pension, from 1st April, 1894, to 31st March, 1885	12 00	
Mary Assance " " "	12 00	
Sarah Monague " " "	12 00	
Amelia Kewatin " " to 31st December, 1894	4 50	
Sarah Assance " " to 31st March, 1895	6 00	
David Assance, secretary, salary, from 1st April, 1894, to 31st March, 1895	35 00	
J. B. Onwahtin, messenger " " "	10 00	
Geo. Bowman, M.D., physician, salary " "	150 00	
Samuel Assance, chief " " "	50 00	
Wesley Montague, sexton " " "	16 00	
W. Montague, contract for outbuildings Christian Island School	116 00	
R. M. Stephen, M.D., part of salary for year ended July 1st, 1894	23 52	
Department of Public Printing and Stationery, school material	8 85	
Wm. Payshegab, arrears of interest, (December, 1891, to June, 1894)	18 82	
Rev. J. Lawrence, sundry articles for school	1 53	
Wesley Montague, repairing school-house	3 25	
D. Wakakouce, arrears of interest	3 40	
Thos. Birkett, locks for school desk	2 10	
Wm. Steers, drawing declaration	2 00	
Rev. A. Sutherland, for half salary of teacher, from 1st April 1894, to 31st March, 1895	103 14	
Eugène Brunelle, hay	47 25	
Adolphe Deroche "	12 00	
Louis Gagnac "	9 00	
Louis Brunelle "	58 00	
Colbert Tessier "	9 00	
Télesphore Deroche "	47 25	
Elzéar Gignac "	9 00	
Balance on 30th June, 1895	140 56	
	3,616 07	3,616 07
By Balance on 30th June, 1895, brought down		140 56

Chippewas of Nawash, Ont. (No. 3)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
To Balance on 30th June, 1894		388,369 89
Land and timber sales and dues		6,107 99
Refund of part of amount advanced for road-work		30 40
Transfer from interest account of part of loan to pay Creighton Brothers		63 82
Transfer from interest on account of loan to pay Creighton debts		81 60
To S. Irwin and Peter McVicar, balance of grant for repair of roads in Saugeen Peninsula	560 00	
J. E. Murphy, balance of grant for repairs of roads in Saugeen Peninsula	1 98	
Transfer to interest account of amount erroneously deducted from interest on account of debts	1,456 17	
Percentage of collections carried to credit of Indian Land Management Fund	610 80	
Balance on 30th June, 1894	392,024 75	
	394,653 70	394,653 70
By Balance on 30th June, 1895, brought down		392,024 75
INTEREST.		
By Balance on 30th June, 1894		3,688 63
Refund of over-payment on road work		20
William Simpson, fees		34 00
Interest on invested capital		16,092 88
J. W. Jermyn, refund of interest moneys of absentees, &c.		120 46
J. Masson, rent of Cove Island		30 00
J. W. Jermyn, rents collected		20 00
Transfer from capital account of amount erroneously deducted on account of debts		1,456 17
C. Parker, moiety of liquor fine (Desjardins)		25 00
To P. T. Jermyn, teacher, Cape Croker, salary, part of September quarter and December quarter, 1894	103 85	
Chief Nawash, transfer to capital on account of loan to pay Creighton debts	81 60	
J. Goodfellow, teacher, Cape Croker, salary, June quarter, 1895	75 00	
Janet Miller, " " " March quarter, 1895	75 00	
J. McIvor, teacher, Sidney Bay, salary from April 1st, 1894, to March 31st, 1895	300 00	
David Craddock, teacher, Port Elgin, salary, June quarter, 1894	62 50	
R. Waugh, " " " part of September quarter and December quarter, 1894, and March quarter, 1895	166 15	
H. Trout, forest bailiff, services and travelling expenses	180 74	
J. W. Jermyn, travelling expenses	106 80	
Interest for distribution	13,396 89	
Expenses W. McGregor, A. Elliott, and T. Lamorandière, visiting Ottawa	30 00	
James Weatherhead, forest bailiff, services and travelling expenses	125 99	
Michael Belrose, " " "	143 99	
R. M. Fisher, M.D., vaccination	25 00	
Expenses, W. B. McGregor and Abner Elliott to grand council	80 00	
R. M. Fisher, M.D., medicine and medical attendance	502 37	
J. H. Gimby, M.D., " "	10 00	
H. Wigle, M.D., medical attendance	104 05	
Edward Jones, repairs to Sydney Bay, Cape Croker and Port Elgin schools	30 55	
H. Jermyn, building stable	200 00	
J. W. Falls, plans and specifications for stable	15 00	
Thos. Kelly, travelling expens *re* saw-mill	24 05	
Mary Ann York, pension, from 1st April, 1894 to 31st March, 1895	20 00	
Margaret Dusonagon, " " "	20 00	
George Ashkiwie, " " "	20 00	
Jane Pahbonash, " " "	20 00	
Mary Kaikaike, " " "	20 00	
Alex. King, " " "	20 00	
Elizabeth King, " " "	20 00	
Margaret Tomau, " " "	40 00	
Carried forward	16,019 53	21,467 34

Department of Indian Affairs.

Chippewas of Nawash (No. 3)—*Concluded.*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	16,019 53	21,467 34
INTEREST—*Concluded.*		
To W. Simpson, commission on timber collections	43 87	
W. B. McGregor, chief, salary from 1st April, 1894, to 31st March, 1895	200 00	
Abner Elliott, " " " "	100 00	
F. Lamorandiere, secretary, " " "	250 00	
Jos. Wahbooke, chief councillor, " " "	17 50	
Moses Kaikaike, councillor, " " "	30 00	
James Solomon, " " " "	30 00	
Peter Elliott, " " " "	30 00	
Edwin Keeshig, caretaker, " " "	50 00	
John Akiwenzie, sexton, " " "	25 00	
John Snake, " " " "	30 00	
J. W. Keeshig, forest guardian, " " ($40, less $10 retained for rent)	30 00	
Mike Johnson, messenger, salary from 1st April, 1894, to 31st March, 1895	20 00	
P. J. Kegedonce, pension, from 1st April, 1894, to 31st March, 1895	75 00	
Daniel Elliott, " " " "	40 00	
W. Mankay, sr., " " " "	25 00	
Joshua Henry, " " " "	10 00	
John Jones, " " " "	20 00	
Mary Jones, " " " "	10 00	
Thos. Onadgwon, " " " "	20 00	
Rebecca Cruikshanks, " " " "	20 00	
Charlotte Taylor, " " " "	20 00	
Margaret Ashkewee, " " " "	20 00	
Cecilia Onadgwon, " " " "	20 00	
Charlotte Smith, " " " "	20 00	
W. S. Clendenning, school inspector	60 90	
British American Insurance Co., premium on council-house, school-house and Methodist church	49 50	
John McIvor, hay for sundry Indians	402 50	
Moses Kaikaike, wood for school, Port Elgin	17 00	
S. Elliott, wood for school, Sidney Bay	17 00	
D. Black, wood for school, Cape Croker	12 00	
A. Tomau, wood for council-house	12 00	
Department of Marine and Fisheries, fishing license	25 00	
Capital account for deduction on account of loan to pay Creighton debts	63 82	
S. A. Perry, coffin for Mary Angus	12 00	
John Akewenza, services as constable	7 40	
J. W. Jermyn, for constable's expenses	50 00	
A. W. Tyson, on account of debts	261 45	
A. J. Kyle, " "	58 73	
Percentage on collections carried to the credit of Indian Land Management Fund	6 54	
Balance or 30th June, 1894	3,235 60	
	21,467 34	21,467 34
By Balance on 30th June, 1895, brought down		3,235 60

Chippewas of Rama, Ont. (No. 4)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		54,562 17
Land sales and timber dues		63 77
To Indian Land Management Fund, for percentage on collections	6 38	
Balance, 30th June, 1895	54,619 56	
	54,625 94	54,625 94
By Balance, 30th June, 1895, brought down		54,619 56
INTEREST.		
By Balance, 30th June, 1894		643 08
Interest on invested capital		2,653 84
D. J. McPhee, refund of interest		43 45
To Interest for distribution	2,009 76	
J. B. Nanigishking, chief, salary from 1st July, 1894, to 30th June, 1895	75 00	
John Kenice, councillor " " "	8 00	
Joseph Yellowhead, councillor " " "	8 00	
J. B. Stenison, councillor " " "	8 00	
Joseph Kenice, secretary " " "	14 00	
I. B. Nanigishking, caretaker " " "	20 00	
J. Shilling, pension, from 1st July, 1894, to 30th June, 1895	6 00	
G. H. Corbett, physician, salary from 1st July, 1894 to 30th June, 1895	149 75	
W. H. Croker, plans, &c., for school outbuildings	13 95	
" insurance premium on council-house and school-building	16 72	
Hon. J. C. Aikens and Rev. A. Sutherland, half of teacher's salary, September and December quarters, 1894, and March quarter, 1895	93 75	
James McBrien, 3 inspections of school	21 00	
John McCosh, legal services, Regina *vs.* Thornton	186 15	
C. W. Myers, relief to destitute	72 50	
World Furnishing Co., for coffins	32 00	
The Canadian Express Co., charges on blankets	70	
Slingsly Manufacturing Co., blankets	20 88	
John Ryan, wood for school	15 00	
Balance, 30th June, 1895	569 21	
	3,340 37	3,340 37
By Balance, 30th June, 1895, brought down		569 21

Department of Indian Affairs.

Chippewas of Sarnia, Ont. (No. 5)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.		
By Balance on 30th June, 1894		208,802 98
Land sales		10 00
To A. English, drain, Kettle Point	925 59	
J. H. Jones, D.L.S., surveys in connection with drain at Kettle Point	25 35	
A. English, balance of grant for road-work	498 18	
Jacob Lawrence, material for building council-house	212 40	
Jones, Coultice & Co. " "	62 53	
D. C. McIntyre " "	47 87	
Jeffrey Brisette " "	25 18	
W. Wawanosh, advance on account of contract, council-house	75 00	
Wm. Maiville, for gravel sold road company	162 00	
Indian Land Management Fund, percentage on collections	1 00	
Balance on June 30th, 1895	206,777 88	
	208,812 98	208,812 98
By Balance on 30th June, 1895, brought down		206,777 88
INTEREST.		
By Balance, 30th June, 1894		1,693 64
Rents collected		364 00
A. English, refunds of interest sent for distribution		1 59
Interest on invested capital		9,152 36
A. English, refund for cemetery land		15 00
To Wilson Jacobs, chief, salary from 1st April, 1894, to 31st March, 1895	100 00	
Elijah George, 2nd " " " "	30 00	
Jabez Nahmabin " " " "	30 00	
Alex. Rogers " " " "	30 00	
James Menass " " " "	30 00	
Lewis Cloud " " " "	30 00	
John Johnson " " " "	30 00	
Samuel Bird, chapel steward, salary " " "	30 00	
S. Kakeense " " " " "	15 00	
James Rodd " " " " "	15 00	
John Johnson " " " " "	15 00	
Thomas George, messenger " " " "	15 00	
Philip George " " " " "	30 00	
W. Wawanosh, interpreter, salary, 1st July, 1894, to June 30th, 1895	100 00	
" secretary " " " "	100 00	
" compensation for land surrendered	150 00	
E. Wawanosh, chief's widow, pension	100 00	
Sarah Kasagance, aged poor grant	24 00	
George Ashquagonaby "	24 00	
Widow Sappah "	12 00	
Sahgutchewaqua "	12 00	
Kahbayah "	12 00	
Petahney "	12 00	
Mahsahdenaqua "	12 00	
Mary Henry "	12 00	
Nancy George "	9 00	
Elizabeth Shawanoo "	12 00	
Albert Rodd "	12 00	
Daniel Nahmabin "	12 00	
Robert George "	12 00	
Isaac Stone "	12 00	
E. Reilly "	12 00	
Waterloo Mutual Fire Insurance Co., insurance premium, council-house	7 80	
A. English, relief of destitute	112 00	
Department Public Printing and Stationery, school material	17 18	
North British and Mercantile Fire and Life Insurance Co., insurance premium on church and mission-house	24 00	
A. S. Fraser, M.D., medical service from 1st July, 1894, to 30th June, 1895	514 55	
A. Scott, M.D. " " " " " "	301 45	
Carried forward	2,027 98	11,226 59

Chippewas of Sarnia (No. 5)—*Continued.*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	2,027 98	11,226 59
INTEREST—*Continued.*		
To C. Saunders & Son, funeral furnishings, &c.	30 00	
J. Schofield, coffins	15 00	
G. L. Phillips, "	3 00	
J. Scarth, "	6 00	
W. B. Clark & Sons, funeral furnishings, &c.	25 86	
A. S. Steele, coffins	3 00	
Anson Diller, "	3 00	
Wm. Nummo, funeral furnishings	15 72	
R. T. Maxwell, " "	1 90	
Thomas George, grave-digging	2 00	
Bella Bowen, teacher, salary, Kettle Point School, June quarter, 1894	62 50	
E. J. Little, " " Kettle Point School, for part of Sept. qr., 1894, Dec. qr., 1894, and March qr., 1895	132 69	
Annie Vance, teacher, salary, Stony Point School, from 1st April, 1894, to 31st March, 1895	200 00	
Hon. J. C. Aikens and Rev. A. Sutherland, half of salary of teacher, St. Clair School, from 1st July, 1894, to 31st March, 1895	112 50	
S. Jackson, grave-digging	16 00	
J. Lawrence, plank and material for culvert	63 48	
Jones, Coultice & Co., " "	5 72	
L. Cloud, travelling expenses	26 00	
J. Johnson, " "	13 00	
W. Jacobs, " "	3 25	
E. George, " "	3 25	
A. Rogers, " "	3 25	
J. Manass, " "	3 25	
R. Renny, sundry supplies, school and council-house	9 56	
C. Wabbuck, rent	25 00	
C. McKenzie & Co., sundry supplies council-house	5 37	
North British and Mercantile Fire and Life Insurance Co., difference on policy	6 00	
J. Brebner, inspecting schools	21 00	
A. English, repairs to bridges and roads	235 31	
A. English, interest for distribution	6,394 24	
J. Kabayah, rent	15 00	
S. Rodd, scrubbing school	1 00	
J. Cloud, plan and specification for school	12 00	
I. Shakence, land for cemetery	15 00	
W. B. Clark & Sons, cement for culvert	6 00	
Hannah & Burnham, legal services *re* destruction of fishing nets	39 65	
J. Coultice, lumber for repairs to school	32 35	
W. Scott, hardware for school	3 13	
J. Cloud, carpenter work for school	15 25	
C. A. Barnes, inspecting schools	33 00	
T. H. Cook, advance for expenses of delegates to grand council	48 00	
Dominion Express Co., charges on school material	35	
W. H. Murifie, repairing organ	3 50	
James Johnson, wood, Stony Point School	10 00	
C. Shawanoo, " Kettle Point School	8 50	
Elijah George, " Sarnia School	15 00	
M. Menass, grant by council	6 00	
P. Nawang, services as constable	3 00	
R. Kenny, paid for cleaning school and council-house	6 00	
James Menass, jr., building culvert	6 75	
Elijah Menass, compensation for horse killed	20 00	
C. McKenzie, Milne & Co., oils, &c.	5 58	
Percentage on collections carried to credit of Indian Land Management Fund.	21 84	
Balance, 30th June, 1895	1,424 86	
	11,226 59	11,226 59
By Balance, 30th June, 1895, brought down	... ...	1,424 86

Department of Indian Affairs.

Chippewas of Saugeen, Ont. (No. 6)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		290,571 18
Land sales and timber dues		5,404 83
Refund of advance for road-work		30 41
To S. G. Kinsey, architect for school-building	131 00	
H. Kalbfleisch, building fence, school grounds	84 00	
S. Irwin and S. McVicar, balance for repair of road, Saugeen Peninsula	560 00	
J. E. Murphy, " " "	1 99	
Percentage on collections carried to credit of Indian Land Management Fund	540 48	
Balance, 30th June, 1895	294,688 95	
	296,006 42	296,006 42
By Balance, 30th June, 1895, brought down		294,688 95
INTEREST.		
By Balance, 30th June, 1894		2,172 50
W. Simpson, fees		34 00
Jas. Allen, refund on Whaley, Royce & Co.'s account		100 00
" account, advance for road-work		22 12
" " of interest		31 83
Interest on invested capital		12,487 08
Jas. Allen, refund collected for band instruments		296 30
" collections on account Gordon debts		160 46
Rents collected		30 00
Jas. Allen, collected on account Creighton debt		500 24
Outstanding cheques for 1892-93		2 50
To H. W. Madwayosh, 1st chief, salary, 1st April, 1894, to 31st March, 1895	150 00	
John George, 2nd chief, " " "	150 00	
Ralph Johnston, chief councillor, " " "	50 00	
W. Elias, interpreter, " " "	150 00	
Hiram Ahyahba, councillor, " " "	30 00	
W. Nashwaisogonaby " " " "	30 00	
J. Cameron, " " " "	30 00	
P. Henry, " " " "	30 00	
L. Kewaquoni, " " " "	30 00	
W. Simpson, sexton, " " "	75 00	
J. Root, sexton, " " "	35 00	
A. Ritchie, caretaker, " " "	30 00	
H. Ritchie, wood-ranger, " " "	40 00	
Moses Noon, messenger, " " "	20 00	
N. Kadageguon, pensioner, " " "	50 00	
Maria Madwayosh, " " " "	50 00	
J. Wabbekeshkining, " " " "	12 00	
C. Nash-kewawedong, " " " "	25 00	
J. Ahtaugay, " " " "	12 00	
Wm. Magum, " " " "	12 00	
Eliza Madweshmind, " " " "	12 00	
C. Sanigwobs, " " " "	12 00	
D. Ritchie, " " " "	12 00	
M. Ritchie, " " " "	12 00	
G. Bedford, " " " "	12 00	
E. George, " " " "	20 00	
S. Mukesega, " " " "	12 00	
M. Mukesega, " " " "	12 00	
J. Ahzahba, " " " "	12 00	
M. A. Awahnoquod, " " " "	12 00	
J. Kenaquom, " " " "	12 00	
H. Nicodemus, " " " "	12 00	
N. Pasheguawedong, " " " "	12 00	
Julius Mashenawedong " " " "	12 00	
Mary Metigrools, " " " "	12 00	
Canadian Express Co., charges on school material	85	
Carried forward	1,199 85	15,837 03

Chippewas of Saugeen (No. 6)—*Continued.*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	1,199 85	15,837 03
INTEREST—*Continued.*		
To Laura Allen, teacher, Saugeen school, salary, from 1st July to 31st December, 1894	155 61	
Arthur Latornelle, teacher, Saugeen school, salary for March quarter, 1895	75 00	
John Burr, teacher, Scotch Settlement school, salary from April 1st, 1894, to March 31st, 1895	300 00	
Helen Cameron, teacher, French Bay school, salary from April 1st, 1894, to March 31st, 1895	300 00	
R. Hanbridge, material for repairs to French Bay school	2 00	
H. Johns, " " "	1 15	
J. Siebert, lumber " "	3 03	
D. Rout, drawing lumber, &c, for "	3 00	
Wm. Simpson, commission on collections	43 85	
J. Wisner, pump for Scotch Settlement school	13 00	
J. Hyde, repairing bell for " " "	60	
J. Burr, whitewashing, &c. " " "	4 60	
P. J. Scott, physician	260 00	
S. G. Kinsey, repairing agent's house and additions	18 75	
Interest for distribution	8,839 53	
James Weatherhead, forest bailiff, services and expenses	126 01	
H. Trout, " "	180 76	
Michael Belrose, " "	144 01	
Whaley, Royce & Co., on account of musical instruments	396 30	
Two fishing licenses	10 00	
Henry Kalbfleisch, school fence	14 00	
S. G. Kinsey, services as architect, building school	98 60	
J. Allan, for road-work	22 00	
Wm. Burke, repairs to pump	5 50	
B. A. Belyea, brooms for Scotch Settlement school	40	
Thompson Bros., bell for Saugeen school	75	
H. Kalbfleisch, repairing teacher's residence, French Bay	281 00	
S. G. Kinsey, architect fees, French Bay school	40 00	
Department of Public Printing and Stationery, school material	31 61	
George Gordon, on account of debts	160 46	
Maria Madwayosh, arrears of interest	7 00	
W. H. Johns, glass and putty for schools	30	
S. G. Kinsey, for painting teacher's residence, French Bay	63 00	
J. J. Creighton, on account of debts	460 03	
W. S. Clendinning, school inspection	67 30	
R. Chamberlain, travelling expenses *re* liquor prosecutions	78 99	
Bank of Montreal, payment of outstanding cheque 2201	50	
Thomas Solomon, wood for school	42 31	
A. P. Sherwood, advance for constable's expenses	30 00	
W. H. Johns, sundries for Saugeen school	2 15	
T. Shutar, constable in liquor case	59 75	
H. Ritchie, " " cases	41 35	
A. Collins, legal services in " "	80 00	
A. E. Belsher, J.P., legal services in liquor cases	74 15	
M. McNamara, " "	3 15	
M. Kennedy, hay supplied Indians	4 50	
Cephas Kahbeeje, interpreting	2 00	
Tienkan & Busby, relief for E. Wahbekakaike	3 00	
J. Johnstone, cow for Hiram Ahyahba	30 00	
A. Stewart, M.D., vaccine points	2 50	
Percentage on collections carried to credit of Indian Land Management Fund	3 84	
Salary of the late Miss Dingman, teacher, 1st to 25th April, 1894	29 00	
Balance, 30th June, 1895	2,020 84	
	15,837 03	15,837 03
By balance, 30th June, 1895, brought down		2,020 84

Department of Indian Affairs

Chippewas of Snake Island, Ont. (No. 7)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		25,082 90
Land sales and timber dues		34 83
To percentage on collections carried to the credit of Indian Land Management Fund	3 84	
Balance, 30th June, 1895	25,114 25	
	25,117 73	25,117 73
By Balance, 30th June, 1895, brought down		25,114 25
INTEREST.		
By Balance, 30th June, 1894		283 69
Interest on invested capital		1,225 36
D. J. McPhee, refund of interest		35 14
R. & N. E. Pugsley, rent of Snake Island		121 00
To D. J. McPhee, interest for distribution	975 00	
C. Bigcanoe, chief, salary from 1st April, 1894, to 31st March, 1895	80 00	
James Charles, councillor, " "	12 00	
George McCue, " " "	12 00	
Jas. Ashquab, " " "	12 00	
J. Charles, caretaker, " "	25 00	
Hon. J. C. Aikens and Rev. A. Sutherland, half of salary of teacher on Georgina Island from 1st July, 1894, to 31st March, 1895	112 50	
H. H. Pringle, M.D., physican, medical services	121 75	
J. W McDonald, lumber and nails for cemetery fence	8 36	
W. Bigsail and W. Charles, building cemetery fence	11 64	
T. C. Howard & Co., provisions for road-workers	5 00	
Slingsby Manufacturing Co., blankets	7 92	
Canadian Express Co., freight charges on blankets	1 15	
W. C. Yarnold, on account of outline survey of Snake and Fox Islands	50 00	
A. B. Davidson, school inspection	6 00	
Department Public Printing and Stationery, school material	1 05	
C. Bigcanoe, I. P. Johnson's railway fare to Michigan	4 00	
T. George, digging grave	1 50	
J. Bigcanoe, coffin	1 50	
Percentage on collections carried to credit of Indian Land Management Fund	7 26	
A. A. McCue, teacher, salary for part of June quarter, 1894	34 38	
Balance, 30th June, 1895	175 18	
	1,665 19	1,665 19
By Balance, 30th June, 1895, brought down		175 18

Chippewas of the Thames, Ont. (No. 8)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts.	$ cts.
By	Balance, 30th June, 1894		66,322 31
	Land sales and timber dues		37 57
To	Percentage on collections carried to credit of Indian Land Mang't Fund	3 76	
	Balance, 30th June, 1894	66,356 12	
		66,359 88	66,359 88
By	Balance, 30th June, 1895, brought down		66,356 12
	INTEREST.		
By	Balance, 30th June, 1894		683 37
	J. Gordon, refund of interest		124 30
	Rents collected		3,319 60
	Interest on invested capital		3,390 20
	Refund of rents		36 25
To	P. C. London, cement ties for culverts	10 80	
	A. Stewart, M.D., v ccine points	10 00	
	Wm. King, balance of rent retained, lease 68	27 00	
	J. Beaver, rent, lease 80	10 50	
	A. M. Johnson, coffin	5 00	
	J. Hendry, lumber and plank for culvert	61 55	
	Lewis Cloud, coffin	8 00	
	Cooper, Richards & Co., sundries for road-work and relief to E. King	24 35	
	Mrs. H. M. Beaver, advance on account of rents retained for G. W. Beaver	350 00	
	Thos. Fisher, for material and work on culvert	11 10	
	Joseph Fisher, chief, salary from 1st April, 1894, to 31st March, 1895	20 00	
	Sam Plain, councillor, " " " " "	20 00	
	Sam French, " " " " " "	20 00	
	J. Fox, " " " " " "	20 00	
	J. Grosbeck, " " " " " "	20 00	
	S. Muskokoman, " " " " "	20 00	
	J. Fisher, secretary, " " " " "	20 00	
	A. Waucaush, interpreter, " " " " "	2 50	
	W. Whitelove, messgr., " " " " "	37 48	
	J. McQuachie, " " " " "	37 48	
	G. Dobson, janitor, " " " " "	12 00	
	S. French, pension, " " " " "	20 00	
	G. Fisher, school trustee, " " " " "	6 00	
	J. French, " " " " " "	6 00	
	J. Chicken, " " " " " "	6 00	
	J. Fisher, " " " " " "	6 00	
	J. Fox, " " " " " "	6 00	
	J. Grosbeck, " " " " " "	6 00	
	D. Sinclair, M. D., " " " " "	200 00	
	Elsie Cobban, teacher Bear Creek school, for June quarter, 1894	50 00	
	Myles McDougall, teacher, Bear Creek school, salary for September and December quarters, 1894, and March quarter, 1895	124 60	
	Abel Waucaush, teacher, Back Settlement school, salary, June, September and December quarters, 1894	150 00	
	Elsie Cobban, teacher, Back Settlement school, salary March quarter, 1895	50 00	
	Jos. Fisher, teacher, River Settlement school, salary March quarter, 1895	50 00	
	H. J. Johnson, school inspection	48 50	
	Rents distributed	2,247 63	
	Expenses of delegates to grand council, Moraviantown	35 00	
	Moses Walker, making culvert	2 88	
	A. McGregor, school-house materials	1 22	
	Richards & Co., relief supplies	5 00	
	Cooper, Richards & Co., relief supplies and culvert spikes	5 33	
	C. Prouty, coffins	5 00	
	W. W. Sheppard, coffins	38 00	
	Rent under lease 135, distributed	94 80	
	Department Public Printing and Stationery, school material	19 38	
	J. Henry, building fence, school grounds	10 00	
	Carried forward	3,941 10	7,553 72

Chippewas of the Thames (No. 8)—*Continued.*

In account with the Department of Indian Affairs.

Service.	Debit	Credit.
	$ cts.	$ cts.
Brought forward	3,941 10	7,553 72
INTEREST—*Continued.*		
To Prize-winners at fall fair	56 23	
Interest moneys distributed	1,529 00	
Cooper, Richards & Co., account against the Burwell Beaver estate	10 80	
" " " " for clothing against estate of G. Madison	10 00	
G. Fisher, claim against J. Noah	12 54	
J. Hendry, lumber for school fence	37 10	
Cooper, Richards & Co, wood for council-house and articles for cemetery	9 65	
Eli Cady, building bridge	10 00	
Relief to destitute (12 persons at $7.50)	90 00	
Canadian Express Co., charges on school material and blankets	95	
Angus McDougall, repairs to Bear Creek school	5 00	
A. McGregor, sundries for Back Settlement school	69	
Thomas Fisher, wood for " " "	12 50	
Cooper, Richards & Co., sundries for Back Settlement school	50	
Richards & Richards, relief to James Albert	2 50	
" " supplies for Bear Creek school	73	
Cooper, Richards & Co., on account of J. T. Waucaush	37 00	
W. W. Sheppard, coffins	26 00	
Sundry persons, wood for schools	34 25	
J. T. Henry, rent for H. W. French	35 00	
A. S McDougall, expenses removal Wm. Sterling and family to Caradoc Reserve	20 00	
Helen Huff, rent, lease 135	13 00	
Joseph Campbell, relief order	5 00	
A. McGregor, relief order	7 50	
J. McGahey, wood for council-house	6 25	
G. Fisher, " " "	6 25	
S. Plain, tile for culverts	1 82	
D. Albert, rent returned under lease 83	2 50	
Ellen Logan, " " " " 83	7 50	
Jas. Batten, horse, seed grain, etc., for W. Sturgeon	55 00	
Jas. Fisher, teacher, salary 1st April, 1894, to 31st March, 1895	150 00	
Percentage on collections carried to credit of Indian Land Management Fund	199 17	
Balance, 30th June, 1895	1,217 99	
	7,553 72	7,553 72
By Balance, 30th June, 1895, brought down	... .	1,217 99

Chippewas of Walpole Island, Ont. (No. 9)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.		
By Balance, 30th June, 1894		69,753 69
To Balance, 30th June, 1895	69,753 69	
	69,753 79	69,753 69
By Balance, 30th June, 1895, brought down		69,753 69
INTEREST.		
By Balance, 30th June, 1894		279 41
Rents		1,294 95
Interest on invested capital		3,104 20
A. McKelvey, refund on invested interest		18 89
" " for seed grain		80 19
Outstanding cheque of 1893-94		2 00
To E. Jackson, material and repairs to No. 3 school	4 00	
S. Jackson, cleaning school-house	1 00	
D. Kiyoshk, sweeping council-house	50	
J. Kiyoshk, scrubbing council-house, 1893	1 00	
E. Thomas " " " 1894	2 00	
W. Peters, teacher, No. 3 Chippewa school, salary, from 1st April, 1894, to 31st March, 1895	300 00	
Albert Saugutch, teacher, No. 1 Chippewa school, from 1st April, 1894, to 31st March, 1895	200 00	
Hon. J. C. Aikens and Rev. A. Sutherland, half of salary of teacher for September and December quarters, 1894	62 50	
J. White, chief, salary from 1st April to 31st December, 1894	22 50	
J. Pindanon, councillor " "	15 00	
J. Greenbird " " "	15 00	
J. Williams, " " "	15 00	
Lewis Fisher, chief, salary from 1st January to 31st March, 1895	7 50	
J. White, councillor " " " "	5 00	
P. Muskokoman " " " "	5 00	
Wamasum " " "	5 00	
P. Kiyoshk " " 1st April, 1894, to 31st March, 1895	20 00	
C. Kiyoshk, secretary " " "	50 00	
Alex. Latimer, pathmaster, salary from 1st April, 1893, to 31st Dec. 1894	6 00	
H. P. Johnson, making coffins	30 00	
J. Kiyoshk, messenger, salary from 1st April to 31st December, 1894	10 00	
C. Nodin, sexton, C. of E " " "	2 50	
G. Sheesheep " " " "	5 00	
J. Thomas " Meth. Ch " " "	7 50	
Waseonquot, pension from 1st April, 1894, to 31st March, 1895	8 00	
Magabawa " " "	8 00	
Kagahmoqua " " "	8 00	
Kewakodoqua " " "	8 00	
Chinquamoqua " " "	8 00	
Quasijiwonoqua " " "	8 00	
Waingishgoqua " " 31st December, 1894	6 00	
Kewadenoqua " " 31st March, 1895	8 00	
Pinahquadoquo " " "	8 00	
Nowkomoqua " " "	8 00	
Petwegisin " " "	8 00	
J. Navarre " " "	8 00	
Nimkeense " " "	8 00	
Penause " " "	8 00	
Adam Brigham " " "	8 00	
Nancy Peters " " "	8 00	
Wm. Yahnodt " " 31st December, 1894	6 0	
J. Weshoe " " 31st March, 1895	8 00	
Ojibnoqua " " and extra assistance	10 00	
Mary Pindanon " " 31st March, 1895	8 00	
Kagayah " " "	8 00	
Wabegenoqua " " "	8 00	
Carried forward	166 00	4,779 64

Department of Indian Affairs

Chippewas of Walpole Island (No. 9)—*Concluded*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	966 00	4,779 64
INTEREST—*Concluded.*		
To Wobegoosh, pension from 1st April, 1894, to 31st Mar., 1895	8 00	
Penache " " "	8 00	
Adwegonaby, relief	2 00	
G. Sheesheep, "	2 50	
Mrs. Augustus Elgin, relief	2 00	
Joseph Thomas "	2 50	
Jacob Peters "	3 00	
Louis Fisher "	3 00	
Angus Williams "	3 00	
Wm. Latimer "	2 00	
J. Yahndt, forest bailiff services from 1st April 1894, to 31st March, 1895.	55 13	
G. Mitchell, M.D., physician, salary, 1st April, 189 , to 31st March, 18 5.	375 00	
F. M. Smith, clock for No. 1 school	5 50	
A. Stewart, M.D., vaccine points	3 00	
Wm. Peters, services as interpreter whilst taking census	5 00	
Chas. Kiyoshk " " "	6 00	
J. Brebner, inspecting schools	50 00	
J. Wilson, repairing No. 3 school	30 40	
J. Kiyoshk, digging graves	5 00	
C. Lendon, funeral furnishing	3 25	
Wm. Logie, medical attendance on A. Kiyoshk	11 50	
Department Public Printing and Stationery, school material	14 74	
Interest moneys distributed	2,025 00	
Wawasum, cleaning No. 3 school	2 00	
Susan Peters, relief grant	2 00	
J. H. Fraser, repairs to school No. 2	50 00	
C. J. Dowswell, funeral furnishings	7 00	
Shaw & Wooliver, hardware	1 24	
Rev. J. Jacobs, for use of hall, pay day and council	4 00	
J. Greenbird, wood for No. 1 school	2 00	
Nagonah, wood for council-house	1 00	
W. Greenbird, digging graves	1 00	
David Day "	1 00	
Wegee, cleaning No. 1 school and digging graves	6 00	
J. McDonald, services as constable at election	1 00	
Canadian Express Co., charges on school material and blankets	25	
C. Stonehouse, relief supplies for destitute	7 00	
J. Comeece, wood for school-houses Nos. 1 and 3	20 00	
D. Melard, desk and book-case for secretary of council	8 00	
M. Wilson, coffin lumber, &c.	10 12	
A. Peters, cleaning No. 3 school-house	1 00	
Nebegishig " "	2 00	
C. Stonehouse, relief to Musinan	2 00	
J. Kowsod, meals supplied men working on road	36 20	
Percentage carried to credit of Indian Land Management Fund	77 19	
Balance, 30th June, 1894	90 12	
	4,779 64	4,779 64
By Balance, 30th June, 1895, brought down		905 12

Fort William Band, Ont. (No. 10)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		14,630 42
J. P. Donnelly, timber dues		25 00
" " dues on 500 cords		50 00
To Advance for improvements to St. Joseph's Orphanage	200 00	
A. Clavet, balance of account for repairs to orphanage	100 65	
Percentage on collections carried to credit of Indian Land Management Fund	7 50	
To Balance, 30th June, 1895	14,397 27	
	14,705 42	14,705 42
By Balance, 30th June, 1895, brought down		14,397 27
INTEREST.		
By Balance, 30th June, 1894		23 08
Interest on invested capital		512 88
To Joseph Singleton, salary as constable from 1st April, 1894, to 31st March, 1895	36 00	
Joseph Weiden, lime, labour, &c., for Fort William school	31 50	
Dr. W. W. Birdsall, balance medical account for 1893	35 00	
Dr. T. S. T. Smillie, medical attendance and medicine for March qr., 1894	125 00	
Graham, Honer & Co., lumber	10 00	
J. P. Donnelly, contingent account September quarter, 1894	3 50	
Dominion Express Co., charges on school material	2 80	
Department Public Printing and Stationery, school material, Oct., 1894	13 77	
J. T. White, school inspection	18 80	
Louis Jerome, wood for Fort William Orphanage	15 00	
John Christie, " " boys' school	12 00	
John Christie, for sawing wood	4 80	
Joseph Weiden, supplies to destitute Indians	68 00	
Réné Dabin, one plough	15 00	
Joseph Weiden, lime and whitewash brushes	4 70	
" " repairing desk, boys' school	1 30	
Shera & Co., clothing for children at orphanage	10 58	
Joseph Weiden, " " " and repairs	45 39	
Alphonse Lauriere, seed potatoes	25 00	
Joseph Weiden, for repairs to council-house	25 85	
Balance, 30th June, 1895	31 55	
	535 96	535 96
By Balance, 30th June, 1895, brought down		31 55

French River Indians, Ont. (No. 11)

CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1994		5,079 23
To Balance, 30th June, 1895	5,079 23	
	5,079 23	5,079 23
By Balance, 30th June, 1895, brought down		5,079 23
INTEREST.		
By Balance, 30th June, 1894		534 43
Interest on invested capital		196 48
To interest distributed	400 00	
R. M. Stephen, M.D., part of salary as physician	23 52	
Balance, 30th June, 1895	307 39	
	730 91	730 91
By Balance, 30th June, 1895, brought down		307 39

Department of Indian Affairs.

Garden River Indians, Ont. (No. 12)

In account with the Department of Indians Affairs.

	Service.	Debit.	Credit.
	CAPITAL.		
By	Balance, 30th June, 1894		70,522 27
	Land sales and timber dues		2,056 86
To	L. S. Mick, for purchase E. ½ of S.W. ¼ sec. 21, township Macdonald	40 00	
	Vincent W. Dooley, bal. of ac't for services as architect for council-house	4 50	
	James Lawler, bal. due on contract building council-house	100 00	
	Percentage on collections carried to credit of Indian Land Management Fund.	205 68	
	Balance, 30th June, 1895	72,228 95	
		72,579 13	72,579 13
By	Balance, 30th June, 1895, brought down		72,228 95
	INTEREST.		
By	Balance, 30th June, 1894		566 86
	Interest on invested capital		2,488 12
	Rents		300 75
	Wm. Van Abbott, fine imposed on F. Biron		5 00
	" " refund of interest		10 53
	" " refund of insurance premiums on store, etc		13 25
	" " refund of amount paid for coffins		8 00
To	Widow Jane Augustin, pension from 1st April, 1894, to 31st March, 1895	4 16	
	Pequetchenene, chief, salary " "	60 00	
	J. A. Reid, M.D., physician, salary " "	100 00	
	Miss A. E. Wilding, teacher, " " "	300 00	
	J. T. White, school inspection	21 25	
	J. A. Reid, M.D., extra medical services	263 00	
	" medicines	59 56	
	Interest distributed	1,528 31	
	James C. Rowland, clock for Church of England school	1 25	
	Dominion Express Co., charges on school material	1 80	
	Department of Public Printing and Stationery, school material	30 17	
	John Nott, J.P., fine imposed on D. Elliott	4 45	
	Thos. Driver, wood for school	15 00	
	Eliza Pine, cleaning school-house and lighting fires	12 00	
	Walter Raynor, ceiling school-house	100 00	
	Rev. G. A. Artus, wood for school	12 00	
	Wm. Van Abbott, donation to 'Xmas. tree	2 00	
	D. McCaig, school inspection	9 50	
	R. H. Carney, insurance premium	13 50	
	A. W. Cunningham, repairs to school-house windows	1 40	
	Frank Clark, wood for school	15 00	
	Sundries for school	65	
	Expenses of deputation to Ottawa and return	76 90	
	J. Huckell, board of deputation in Ottawa	12 50	
	Percentage on collections carried to credit of Indian Land Management Fund	18 35	
	Balance, 30th June, 1895	729 76	
		3,392 51	3,392 51
By	Balance, 30th June, 1895, brought down		729 76

Henvey Inlet Indians, Ont. (No. 13)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		7,240 50
To Balance, 30th June, 1895	7,240 50	
	7,240 50	7,240 50
By Balance, 30th June, 1895, brought down		7,240 50
INTEREST.		
By Balance, 30th June, 1894		21 75
Interest on invested capital		254 20
Refund of interest		129 01
To Jos. Tebeshkogeshic, chief, salary from 1st April, 1894, to 31st March, 1895	30 06	
Joseph Meshogoquon " " " "	16 92	
Ed. Gauvreau, M.D., vaccine points	3 35	
Quakoose, share of interest, 1894	50	
Wm. Beatty, material for repairing teacher's residence	8 13	
Department Public Printing and Stationery, school material	3 26	
David Craddock, teacher, salary from 1st October, 1894, to 31st March, 1895	50 00	
Joseph Meshogoquon, care of oxen to 31st December, 1894	10 00	
Angus Meshogoquon, fuel for school	10 00	
Interest distributed	125 47	
Balance, 30th June, 1895	147 27	
	404 96	404 96
By Balance, 30th June, 1895, brought down		147 27

Lake Nipissing Indians, Ont. (No. 14)

CAPITAL.		
By Balance, 30th June, 1894		36,863 03
Timber dues and ground rent		6,947 66
To Indian Land Management Fund, for percentage on collections	694 77	
Balance, 30th June, 1895	43,115 92	
	43,810 69	43,810 69
By Balance, 30th June, 1895, brought down		43,115 92
INTEREST.		
By Balance, 30th June, 1894		218 39
Refund of interest		234 23
Interest on invested capital		1,297 84
Ground rent		324 00
To Semo Commanda, chief, salary from 1st April, 1894, to 31st March, 1895	50 00	
Louis Beaucage " " " "	20 00	
Semo Commanda, caretaker " " "	10 00	
F. E. Crawford, teacher " " 30th June, 1894	62 50	
Bella Johnston, teacher, salary from 1st October, 1894, to 31st March, 1895	125 00	
Moses McKay, constable " 1st November, '93 to 31st October, '94	14 00	
Martin Ducharme " " " "	14 00	
Department of Public Printing & Stationery, stationery and school material	1 42	
Rev. George Grant, inspecting schools	33 00	
John Cochar, wood for school	23 62	
E. Gauvreau, M.D., vaccine points	3 34	
Interest for distribution	1,415 71	
Indian Land Management Fund, for percentage on collections	19 44	
Balance, 30th June, 1895	282 43	
	2,074 46	2,074 46
By Balance, 30th June, 1895, brought down		282 43

Department of Indian Affairs.

Manitoulin Island (Unceded) (No. 15)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		26,107 58
Timber dues		2,809 77
Refund, advance for road-work		99
To Repairs to roads	612 61	
Indian Land Management Fund, for percentage on collections	280 98	
Balance, 30th June, 1895	28,024 75	
	28,918 34	28,918 34
By Balance, 30th June, 1895, brought down		28,024 75
INTEREST.		
By Balance, 30th June, 1894		23 46
Interest on invested capital		914 60
To R. M. Stephen, M.D., proportion of salary as physician from 1st July, 1894, to 30th June 1895	490 04	
George Rennicks for services as veterinary surgeon	135 00	
Relief of destitute Indians	184 00	
W. A. McLeod, for services instructing Indians in connection with manufacture of railway ties	81 90	
Balance, 30th June, 1895	47 12	
	938 06	938 06
By Balance, 30th June, 1895, brought down		47 12

Maganettewan Indians, Ont. (No. 16)

CAPITAL.		
By Balance, 30th June, 1894		510 32
To Balance, 30th June, 1895	510 32	
	510 32	510 32
By Balance, 30th June, 1895, brought down		510 32
INTEREST.		
By Interest on invested capital		17 60
To Balance, 30th June, 1894	7 25	
Arrears of interest to Antoine Sebewai	71	
Balance, 30th June, 1895	9 64	
	17 60	17 60
By Balance, 30th June, 1895, brought down		9 64

Mississaguas of Alnwick, Ont. (No. 17)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts.	$ cts.
By	Balance, 30th June, 1894		76,695 17
	Collections from sale of islands in River St. Lawrence		17,342 23
	Timber dues		4 00
	Amount received for gravel		10 72
	Amount of cheque issued in favour of W. L. Hibbard, 1893-4, not presented for payment		10 80
To	Balance, 30th June, 1895	94,062 92	
		94,062 92	94,062 92
By	Balance, 30th June, 1895, brought down		94,062 92
	INTEREST.		
By	Balance, 30th June, 1894		541 80
	Rent collections		1,579 46
	Refund of interest		60 62
	Collections from Indians for non-performance of road-work		31 00
	Gazette Printing Co., refund of payment for advertising		16 00
	Jos. Jones, " " "		1 31
	Liquor fine imposed on J. Comego		10 00
	Wire sold J. Comego		2 50
	Timber sold off T. Tobico's lot		12 00
	Refund of advance for repairing church		1 60
	Interest on invested capital		3,979 80
To	Mitchell Chubb, chief, salary 1st April, 1894, to 31st March, 1895	30 00	
	Peter Crow, councillor, " " "	12 00	
	Thos. Marsden, " " " "	12 00	
	Hiram Beaver, " " " "	12 00	
	Enoch Crowe, councillor, " " "	12 00	
	Wm. Lukes, secretary, " " "	24 00	
	Ebenezer Comego, sexton, " " "	60 00	
	Eliza J. Blaker, organist, " " "	20 00	
	Susan Sky, pension, " " "	10 00	
	Thos. C. Lapp, M.D., physician, " " "	275 00	
	A. B. Cowan, island guardian, salary 1st July, 1894, to 30th June, 1895	246 88	
	A. B. Cowan, travelling expenses	34 47	
	Wm. Edmison, rent	22 50	
	Thos. Marsden, "	18 00	
	Geo. Blaker, "	38 75	
	Mary A. Shippegau, rent	23 75	
	Maria Madwayosh "	5 00	
	John Sunday, "	5 00	
	James Blaker, "	22 50	
	Madden Crowe, "	23 00	
	Allan Salt, "	4 13	
	Mitchell Chubb, "	16 57	
	Robert Gray, "	2 11	
	Allan Tobico, "	5 00	
	Kingston "News," advertising sale of islands in River St. Lawrence	17 50	
	Buffalo "Courier," " " " " "	12 50	
	Gananoque "Journal," " " " " "	4 20	
	Cobourg "Sentinel-Star," " " " " "	4 55	
	The Geo. P. Rowell Advt. Co. for advertising sale of islands in St. Lawrence River	59 40	
	Peterborough "Times," advertising sale of islands in River St. Lawrence	18 00	
	Hamilton "Spectator," " " " " "	105 60	
	Geo. Comego, royalty on gravel, Location 88	10 72	
	British American Assurance Co., premium on policy 102,243	12 50	
	Funeral expenses A. Comego	11 50	
	Joseph Beaver, digging grave	2 00	
	Robt. Grey, " "	16 00	
	The Nicholls Hospital for attendance on Martha Blackie	3 50	
	E. Bellighem, funeral expenses for Martha Blackie	18 50	
	J. Thackeray, for repairs to culvert	1 50	
	Carried forward	1,232 63	6,236 09

Department of Indian Affairs.

Mississaguas of Alnwick (No. 17)—*Concluded.*

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
		$ cts.	$ cts.
	Brought forward	1,232 63	6,236 09
	INTEREST—*Concluded.*		
To	John McMillan, coffins	50 00	
	J. Raymond, painting mission school	37 00	
	W. Lukes, repairs to mission school	12 00	
	E. Scarlett, inspecting schools	13 03	
	John Cochran, on account of house for J. H. Chase	20 00	
	Jos. Cook, in full as agent for sale of Islands	250 00	
	The World Furnishing Co., coffin	7 00	
	Rev. A. Sutherland, part salary of teacher	31 25	
	Robert Marsden, repairing culvert	3 00	
	Canadian Office and School Furnishing Co., teacher's desk	8 00	
	" " " " " minister's chair	13 60	
	Hubert Smoke, work on outbuildings Alnwick school	2 75	
	Wm. Lukes, repairs Alnwick school	1 25	
	H. M. Fowlds & Son, seed grain	250 22	
	G. McGovern, seed grain	11 00	
	John Ball, seed grain	11 78	
	C. F. Caddy, surveying village lots	18 00	
	Mississaguas of Mud Lake, credit in error Aug., 1894	1 31	
	Superannuation Account, abatement from agent's salary	3 12	
	Indian Land Management Fund, for percentage on collections	96 09	
	Department of Public Printing and Stationery, school material	159 63	
	J. G. Wallace, inspector of islands, salary, 1st Jan'y, 1894 to 31st Dec., '94	25 00	
	Refund of interest	38 15	
	Arrears of interest	9 88	
	Interest for distribution	2,609 55	
	Rent	967 67	
	Balance, 30th June, 1895	353 18	
		6,236 09	6,236 09
By	Balance, 30th June, 1895, brought down	.....	353 18

Mississaguas of the Credit, Ont. (No. 18)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance on 30th June, 1894		84,561 15
W. H. Young, payment on lots in Bronte		60 30
T. H. Churchill, " "		37 20
To Jos. Seymour, building bridge at Boston Creek	169 50	
S. Dixon, moving school-house to council-house grounds	173 00	
Percentage on collection	9 75	
John Graham, building fence and gate at mission-house	77 00	
Balance on 30th June, 1895	84,229 40	
	84,658 65	84,658 65
By Balance on 30th June, 1894, brought down		84,229 40
INTEREST.		
By Balance on 30th June, 1894		639 49
Rents collected		28 80
Fine		20 00
Refund to R. E. Jones, cheque 1,103		1 25
" of interest		71 60
Wm. Stirling, refund of grant for fire loss		200 00
Interest on invested capital		4,827 00
To Norman Black, teacher, salary, 1st April, 1894, to 31st March, 1895	243 75	
D. McDougal, chief, " " "	100 00	
Joseph Laforn, councillor, " " "	45 00	
Peter Salt, " " "	45 00	
Joseph Chubb, " " "	45 00	
George J. King, " " "	45 00	
John Chechock, caretaker, " " 31st December, 1894	18 75	
P. E. Jones, physician, salary, " 31st March, 1895	250 00	
Adam Secord, caretaker, " " 31st December, 1894	18 75	
Jas. Laform, " " " 31st March, 1895	5 00	
Wm. King, " " " "	6 25	
Chester Laform, " " " "	7 50	
Daniel Tobicoe, sexton, " " 31st December, 1894	18 75	
Mrs. Robert Brant, organist, " " "	18 75	
Bertha Herchmer, " " " 31st March, 1895	6 25	
Mary Young, pension, " " "	25 00	
Phœbe Wilson, " " " "	25 00	
Cath. Chechock, " " " "	25 00	
Jacob Johnston, " " " "	25 00	
Wilfrid Jones, " " " 31st December, 1894	18 75	
British American Insurance Co., premium on policy, 276,757	12 75	
C. J. Heaslip, funeral furnishings	128 00	
Wm. Harrison & Son, "	16 00	
John H. Hager, cleaning road of drifted ice	5 00	
John Long, repairing road scrapers	3 00	
Daniel Keys, services as scrutineer	1 50	
B. L. Griffiths, attendance at election of councillors	9 00	
M. J. Kelly, inspection of schools	14 00	
D. J. Lynch, oil for council-house	2 15	
A. A. Jones, papering church	5 50	
P. E. Jones, prizes for school children	53 74	
J. W. Park, relief to destitute	163 30	
D. Almas & Son "	15 00	
A. Salt "	5 00	
Robert Fisher "	5 00	
John H. Hagar, relief and grave-digging	14 00	
" " sundries for church	67 36	
Wm. Stirling, compensation for fire loss	266 66	
James Laform " "	97 66	
Grading at Boston Creek bridge	232 68	
T. A. Snider, legal services (Johnston *vs.* P. E. Jones)	25 00	
T. B. Geddes "	1 50	
Carried forward	2,136 30	5,788 14

Department of Indian Affairs.

Mississaguas of the Credit (No. 18)—*Concluded.*

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
		$ cts.	$ cts.
	Brought forward	2,136 30	5,788 14
	INTEREST—*Concluded.*		
To	T. E. Hodgins, legal services (Johnston *vs.* P. E. Jones)	3 35	
	E. Furlong " (*re* arbitration)	100 00	
	J. Bergin " "	100 00	
	E. Hagar, supplies for school picnic	7 01	
	J. W. Park " "	16 87	
	N. T. Black, expenses *re* election of chiefs	1 50	
	B. L. Griffith " "	1 50	
	D. Forsyth, services as constable	3 00	
	Elvin Dixon, expenses of delegates to grand council	66 00	
	James Sheldrick, sundries for council-house	6 28	
	Robert Fisher, glazing, &c	1 50	
	" paid for board of well-diggers	12 50	
	Canadian Express Co., charges on school material	1 75	
	A. E. Jones, painting council-house building	65 00	
	P. E. Jones, on account expenses of deputation	5 00	
	Joel Ward, stenographer	12 60	
	D. Almas & Son, investigating death of G. T. Henry	22 15	
	John Graham, repairing pumps	10 00	
	J. E. Pedlow, supplies for school-house	1 40	
	Silvanus Dixon, material and repairs for school-house	12 50	
	S. W. Howard, stationery for chief councillor	60	
	"News" Printing Co., printing notices, &c	9 25	
	Daniel J. Lynch and J. Chechock, expenses to Hamilton	7 00	
	Silvanus Dixon, expenses of P. E. Jones and J. Chechock to Hamilton	15 00	
	Dominion Express Co., express charges	70	
	P. E. Jones, advance for travelling expenses to Hamilton *re* arbitration	20 00	
	S. W. Howard, medicines	11 82	
	John H. Hagar, injury to horse	9 04	
	Department Public Printing and Stationery, school material	24 40	
	Indian Land Management Fund, for percentage on collections	2 93	
	P. E. Jones, interest for distribution	2,641 00	
	Balance, 30th June, 1895	460 19	
		5,788 14	5,788 14
By	Balance, 30th June, 1895, brought down		460 19

Mississaguas of Rice Lake, Ont. (No. 19)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts.	$ cts.
By	Balance on 30th June, 1894		22,382 50
	Amount received for gravel		15 75
	Proportions of collections on account of sales of Islands		71 43
	Land sales		16 99
To	Indian Land Management Fund, for percentage on collections	10 42	
	Balance on 30th June, 1895	22,476 25	
		22,486 67	22,486 67
By	Balance on 30th June, 1895, brought down		22,476 25
	INTEREST.		
By	Balance on 30th June, 1894		157 36
	Rent		615 20
	Interest moneys refunded		9 90
	Collections from Indians for non-performance of road-work		10 00
	Interest on invested capital		1,077 40
To	Robert Paudash, chief, salary, 1st April, 1894, to 31st March, 1895	25 00	
	Wellington Cowe, councillor, salary, " "	8 00	
	Madden Howard " " "	8 00	
	James Jarvis " " "	8 00	
	Christina Anderson, secretary, salary from 1st April, 1894, to 31st Dec., 1894	6 00	
	Christina Cowe, " " 1st Jan., 1895, to 31st March, 1895	2 00	
	John Howard, sexton " 1st April, 1894, to 31st March, 1895	35 00	
	John M. Shaw, M.D., physician " " "	150 00	
	J. W. Crosby, balance due on organ	40 00	
	A. Stewart, M.D., vaccine points	2 00	
	Agent Royal Insurance Company on account premiums on policy	1 50	
	" " " balance on policy	1 00	
	Oswald A. Cragg, painting mission church	20 00	
	Canadian Office and School Furniture Company, teacher's desk	8 00	
	Andrew Anderson, wood for school	12 00	
	Thos. Mather, coffin	8 00	
	Thos. R. Hewson, P.L.S. examination of Islands, Stony Lake	23 83	
	Hon. J. C. Aikens and Rev. A. Sutherland, part of teacher's salary for September and March quarters	62 50	
	Chas. King, insurance on church	24 87	
	Rents distributed	565 72	
	Indian Land Management Fund, for percentage on collections	36 91	
	Interest for distribution	709 34	
	Balance on 30th June, 1895	112 19	
		1,869 86	1,869 86
By	Balance on 30th June, 1895, brought down		112 19

Department of Indian Affairs.

Mississaguas of Mud Lake, Ont. (No. 20)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		37,381 54
Proportions of collections on account of sale of islands		30 53
Refund from Jos. Jones on account of loan		60 00
" G. Taylor "		13 47
" Z. Knott "		15 00
" J. W. Jacobs "		14 69
" J. Taylor "		7 00
Land sales		35 05
To A. E. Kennedy, building 4 houses	538 01	
Indian Land Management Fund, for percentage on collections	6 56	
Balance, 30th June, 1895	37,012 71	
	37,557 28	37,557 28
By Balance, 30th June, 1895, brought down		37,012 71
INTEREST.		
By Balance, 30th June, 1894		419 18
Collections from sundry Indians for non-performance of road-work		2 00
Jos. Jones, refund on account of advance for building house, &c		2 49
Interest on loans		6 67
Refund of interest		6 73
Interest on invested capital		1,804 92
To Joseph Irons, chief, salary, 1st April, 1894, to 31st March, 1895	25 00	
Wm. Whetung, sexton, " " "	30 00	
Samson Fawn, secretary " " "	8 00	
Geo. Taylor, sr., pensioner " " "	1 00	
John R. Fraser, M.D., medical attendance on Chief Jos. Jones	130 00	
A. E. Kennedy, M.D., grant for medical attendance	40 00	
Thos. R. Hewson, P.L.S., for examination of islands, Stony Lake	44 93	
Moses McCue, repairs to church	8 50	
T. Hendren, coffins	18 00	
Thos. Mather "	8 00	
The Nicholls Hospital, attendance on Josh. Brown	11 00	
James McCue, arrears of interest	11 51	
Interest for distribution	1,514 65	
Balance, 30th June, 1895	378 40	
	2,241 99	2,241 99
By Balance, 30th June, 1895, brought down		378 40

Mississaguas of Scugog, Ont. (No. 21)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		10,444 74
Proportions of collections on account of sale of islands		8 04
Land sales		7 96
To Indian Land Management Fund, for percentage on collections	1 60	
Balance, 30th June, 1895	10,459 14	
	10,460 74	10,460 74
By Balance, 30th June, 1895, brought down		10,459 14
INTEREST.		
By Balance, 30th June, 1894		99 56
Refund of interest		2 97
Rent		595 00
Interest on invested capital		486 60
To Issac Johnson, chief, salary from 1st of April, 1894, to 31st March, 1895	19 00	
John Johnson, pension, " "	25 00	
Louisa Johnson, secretary, " "	6 00	
Thos. R. Hewson, P.L.S., examination of islands, Stony Lake	11 24	
J. W. Davis, coffin	6 00	
Jones & Co., funeral furnishings	91	
J. Stones, repairing house	11 05	
John Gamble, cedar fence rails	60 00	
Canadian Express Co., charges on blankets	60	
Slingsby Mfg. Co., blankets	4 14	
A. Stewart, M.D., vaccine points	1 00	
R. J. Bruce, material for fencing	150 22	
Indian Land Management Fund, for percentage on collections	35 70	
Interest for distribution	765 00	
Balance, 30th June, 1895	88 27	
	1,184 13	1,184 13
By Balance, 30th June, 1895, brought down		88 27

Department of Indian Affairs.

Mohawks of Bay of Quinté, Ont. (No. 22)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts.	$ cts.
By	Balance on 30th June, 1894		110,174 18
	Rents on account of loan for fencing, &c		1,055 01
	Land sales		2,730 20
To	Paid on account of barn for W. Sero	100 00	
	Widow John Penn, refund of rent retained	17 60	
	John Mark, on account of house	32 40	
	John Claus, refund of rent retained	80 50	
	W. G. Egar, advance on account of fencing	220 78	
	Solomon Loft, on account of addition to barn	88 28	
	Mrs. John Baptiste, refund of rent retained	47 48	
	W. G. Egar, for repairs to John S. Brant's barn	32 45	
	Stephen Maracle, refund of rent retained	39 46	
	Brant Brant, " "	18 25	
	John Powles, " "	75 00	
	Henry Powles, " "	18 61	
	Nelson Maracle, " "	8 00	
	Henry Hill, " "	20 00	
	Widow Lawrence Maracle, refund of rent retained	40 00	
	Isaac Socco, " "	34 04	
	Mrs. Lawrence Claus, " "	53 54	
	Mrs. Cornelius Brant, " "	50 00	
	Samuel P. Brant, " "	50 86	
	Abram P. Brant, " "	25 00	
	Elith Hill, " "	41	
	Wm. Maracle, " "	73 72	
	J. S. Brant, " "	11 60	
	Alex. Loft, " "	112 50	
	Isaac Powles, building bridge Sucker Creek	495 00	
	The Rathbun Co., material for Wm. Sero's barn	201 55	
	The Rathbun Co., fencing material	112 67	
	Percentage on collections carried to credit of Indian Land Managem't Fund	333 30	
	Balance on 30th June, 1895	111,566 39	
		113,959 39	113,959 39
By	Balance on 30th June, 1895, brought down		111,566 39
	INTEREST.		
By	Balance on 30th June, 1894		409 20
	Rents		2,111 62
	Liquor fines, $10.00, $5.00, $5.00		20 00
	D. O'Leary, refund of advance for travelling expenses		2 85
	W. G. Egar, refund from interest distribution		13 42
	Interest on land sales		1,229 75
	Interest on invested capital		5,422 76
To	Jacob B. Brant, chief, salary from 1st April, 1894, to 31st Dec., 1895	18 00	
	Solomon Loft, " " " " 31st March, 1895	40 00	
	Sampson Green, " " " " "	24 00	
	Frank Claus, " " 1st Jan., 1895, to 31st March, 1895	6 00	
	J. J Brant, " " 1st April, 1894 to 31st Dec., 1894	18 00	
	Wm. Powles, " " 1st Jan., 1895 to 31st March, 1895	6 00	
	Isaac Powles, " " 1st April, 1894 to 31st Dec., 1894	18 00	
	Stephen Maracle, " " 1st Jan., to 31st March, 1895	6 00	
	Lydia Maracle, pension, 1st April, 1894, to 31st March, 1895	16 00	
	Hannah Barnhart, pension, " " " "	16 00	
	John D. Green, " " " " "	16 00	
	Milo Maracle, " " " " "	16 00	
	Elias Green, " " " "	16 00	
	Sampson Williams, " " " " "	16 00	
	Henry H. Maracle, " " " "	16 00	
	Edward Lewis, " 1st July, 1894, to 31st March, 1895	12 00	
	Henry Hill, caretaker, salary, 1st April, 1894 to " "	17 75	
	Robt. Maracle, sexton, " " " " "	40 00	
	Carried forward	317 75	9,209 60

Mohawks of Bay of Quinté (No. 22)—*Concluded.*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	317 75	9,209 60
INTEREST—*Concluded.*		
To Abram Sero, sexton, salary, 1st April, 1894, to 31st March, 1895	20 00	
Sylvester Moses, constable, salary, 1st April, 1894, to 30th June, 1894	8 33	
Michael Claus, " " " " to 31st March, 1895	49 99	
Rev. G. A. Anderson, missionary, salary, 1st April, 1894, 31st March, 1895	400 00	
J. Newton, M.D., physician, " " " "	250 00	
G. A. Whiteman, M.D., " " " " "	250 00	
Nellie Bowen, " " " " "	112 50	
Jessie Meneilly, teacher, salary, 1st April, 1894, to 31st December, 1894	187 50	
J. McCullough, police commissioner, salary, 1st April, 1894, to 31st December, 1894	150 00	
Alwinda Graham, teacher, salary, 1st April, 1894, to 31st December, 1895	112 50	
Maggie Allen, " " 1st Jan., 1895, to 31st March, 1895	62 50	
Helen Demorest, " " " " " "	37 50	
Wm. Tedman, " " " " " "	37 50	
Toronto Asylum, maintenance of Ellen Penn	143 00	
J. A. J. McKenna, travelling expenses	21 15	
H. R. Bedford, legal services	84 69	
George Snider, clock for Central school	4 50	
E. Loft, services as caretaker Mission school	10 00	
Toronto Asylum, maintenance of Cyrus Maracle	156 00	
Dominion Express Co., freight	90	
School material	28 21	
J. F. Vanasse, expenses in connection with liquor prosecutions	30 00	
Brant Brant, repairs to barn	15 50	
Wm. Martin, "	2 00	
F. Donahue & Bros., nails for barn	4 38	
The Rathbun Co., lumber "	51 72	
Royal Insurance Co., premium on ferry boat	18 00	
Grants to destitute Indians	40 00	
J. J. Kerr, uniform for constable	10 75	
Rathbun Co., " "	19 00	
Mrs. A. J. S. Maracle, scrubbing school	2 50	
Peter Green, rebuilding fence on lot 35	25 00	
G. A. Whiteman, M.D., vaccinating	50 00	
John Newton, M.D., "	63 50	
Michael Claus, board of constable	7 50	
James Gault, horse hire for constable	21 00	
D. O'Leary, expenses in connection with liquor traffic	25 00	
Jemima Maracle, compensation for loss by fire	25 00	
Henry Hill, services distributing flour	5 00	
Solomon Loft, registering lands	30 00	
George Stuart, board of S. Loft	13 75	
Sampson Green, travelling expenses, Deseronto to Ottawa and return	13 45	
Rents distributed	2,188 56	
C. R. Cunningham, premium of insurance on school	6 75	
J. J. Kerr, clothing for Isaac Socco	11 25	
Interest distributed	3,282 80	
W. J. Mayell, fees for pupils attending Shannonville school	6 25	
Rathbun Co., fuel for schools	37 58	
Percentage on collections carried to credit of Indian Land Managem't Fund	250 87	
Balance on 30th June, 1895	507 97	
	9,209 60	9,209 60
By Balance on 30th June, 1895, brought down	... .	507 97

Department of Indian Affairs.

Moravians of the Thames, Ont. (No. 23)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts	$ cts.
By	Balance, 30th June, 1894		158,047 33
	J. Beattie, refund on account of Mason debt		29 65
	" " drain		35 96
To	Thomas Bodkin, advance on drain contract	100 00	
	J. W. Shackleton, levels and estimate for proposed drain	40 00	
	W. Wesley, printing notices	2 50	
	Balance on 30th June, 1895	157,970 44	
		158,112 94	158,112 94
By	Balance, 30th June, 1895, brought down		157,970 44
	INTEREST.		
By	Balance, 30th June, 1894		1,318 15
	Liquor fines		24 88
	J. Beattie, refund from A. Tobias on account of loan		60 00
	Assessments for drain		17 98
	Refund of interest		58 55
	Interest on invested capital		6,185 28
To	Albert Tobias, chief, salary, 1st April, 1894, to 31st March, 1895	60 00	
	Washington Jacobs, councillor, " " "	20 00	
	Walter Tobias, " " " "	20 00	
	Jonathan Hill, " " " "	20 00	
	Alfred E. Wampum, secretary, " " "	50 00	
	Elijah Jacobs, truant officer, " " "	10 00	
	Samuel Lacelle, caretaker and gravedigger, " "	26 00	
	Isaac Hill, caretaker of school, 1st April, 1894, to 31st December, 1894	15 00	
	John Hendrick, caretaker, 1st January, 1895, to 31st March, 1895	4 50	
	Keturah Stonefish, pension, 1st April, 1894, to 31st December, 1894	12 00	
	Eunice Peters, " " " 31st March, 1895	16 00	
	Polly Jacobs, " " " 31st December, 1894	12 00	
	F. H. Pope, M.D., physician, salary, 1st April, 1894, to 30th April, 1894	25 00	
	Delaski Marr, M.D., " 1st August, 1894, to 31st March, 1895	200 00	
	Duncan McPhail, M.D., medical attendance	4 50	
	George Caus, M.D., "	22 87	
	A. D. Graham, M.D., "	22 62	
	Willis N. Tobias, salary as teacher, part of June quarter, Moraviantown	43 75	
	Isabella Johnston, teacher, Moraviantown, salary, 1st January, 1894, to 31st March, 1895	43 75	
	George Grant, teacher, salary, 1st October, 1894, to 31st March, 1895	175 50	
	" 30 days, September quarter 1894	40 38	
	Johnston & McCreary, coffins	18 00	
	Isaac Hill, whitewashing Indian school-house	3 00	
	Jos. Leycroft, livery hire for Agent Beattie	2 50	
	W. H. E. Collis, inspection of schools	30 00	
	Oliver Crowell, plank for culvert	18 00	
	Chas. Wise, painting inside of council-house	25 00	
	Wm. R. Snake, board to delegates to grand council	65 75	
	A. Tobias, western fair expenses	40 00	
	Joseph Huff, salary as inspector	14 00	
	A. Tobias, repairs to school well	4 00	
	Albert Tobias, sundries for council-house	6 60	
	McEcheren & Hopkins, coffins	60 00	
	E. Beattie, funeral furnishings	4 32	
	Albert Tobias, wood	32 25	
	Crosby & Hussy, sundries for school	2 00	
	G. Beattie "	1 15	
	Whaley, Royce & Co., musical instruments	45 00	
	Express on band instruments	2 25	
	A. & S. Nordheimer, instruments for band	48 34	
	M. Leber, horse purchased by Eli Dolson	40 00	
	T. B. Marr, mare purchased by John B. Noah	50 00	
	Carried forward	1,352 53	7,664 84

Moravians of the Thames (No. 23)—*Concluded*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	1,352 53	7,664 84
INTEREST—*Concluded.*		
To Peter McPhail, lumber waggon purchased by John B. Noah	42 50	
Robert Hogg, hay " "	7 00	
Charles W. Richardson, seed oats	19 65	
John Puddicomb, farm implements	31 00	
Darling & Co., team harness	29 00	
John Mellis, neck yoke	1 25	
T. W. Scott, lumber	18 09	
Crosby & Hussy, hardware	8 15	
D. McMackon, material	4 00	
Oliver Crowell "	20 00	
McLaren & Raycraft, seed beans	4 00	
E. Beattie, potatoes	2 46	
John McLennan, cow	30 00	
Edward Dark, cow	33 00	
Department of Public Printing and Stationery, school material	8 36	
Albert Tobias, services as interpreter	7 00	
Ed. Tobias, refund of amount retained	2 20	
Jules Caron, relief to destitute	2 55	
Chief A. Tobias, loan to J. Lacelles	105 00	
Interest for distribution	4,803 31	
Indian Land Management Fund, for percentage on collections	1 49	
Balance, 30th June, 1895	1,129 30	
	7,664 84	7,664 84
By Balance, 30th June, 1895, brought down		1,129 30

Department of Indian Affairs.

Munsees of the Thames, Ont. (No. 24)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		2,632 74
To Balance, 30th June, 1895	2,632 74	
	2,632 74	2,632 74
By Balance, 30th June, 1895, brought down		2,632 74
INTEREST.		
By Balance, 30th June, 1894		60 02
Rent		85 00
Interest on invested capital		94 24
To Scobbie Logan, chief, salary, 1st April, 1894, to 31st March, 1895	4 00	
W. L. Waddilove " " "	4 00	
John Nicholas, secretary " "	4 00	
Albert Peter, messenger " "	4 00	
H. D. Johnson, inspecting schools	13 50	
Louis Beach, painting blackboard at school	3 00	
A. McGregor, sundries for school	1 40	
G. B. Hoskins " "	1 75	
Jacob Logan, making culvert	1 00	
A. M. Johnson, coffin	8 00	
Cornelius Logan, wood	1 05	
Lewis Logan, "	5 12	
Jacob Logan "	3 50	
Wm. Waddilove "	2 00	
James Hendry, lumber for culverts	2 69	
Joshua S. Wilson, rent	40 00	
Mary Wilson "	35 00	
Department of Public Printing and Stationery, school material	1 85	
Indian Land Management Fund, for percentage on collections	5 10	
Balance, 30th June, 1895	98 30	
	239 26	239 26
By Balance, 30th June, 1895, brought down		98 30

Ojibbewas and Ottawas of Manitoulin Island (No. 25)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts.	$ cts.
By	Balance, 30th June, 1894		139,544 73
	Land and timber sales		9,360 21
	Marine and Fisheries Department, site for lighthouse		25 00
	Refund on account of advance for road-work		22 33
To	H. S. Sims, in full of claim on water lot, Township of Shaftesbury	50 00	
	Balance of grant for road-work	150 00	
	Charles McArthur, refund of amount paid on land	21 63	
	Indian Land Management Fund, for percentage on collections	1,921 51	
	Balance, 30th June, 1895	147,009 13	
		149,152 27	149,152 27
By	Balance, 30th June, 1895, brought down		147,009 13
	INTEREST.		
By	Balance, 30th June, 1895		1,417 86
	Rent		799 57
	Fines		100 00
	Refund on account of constable's travelling expenses		38 12
	Part of W. A. McLeod's account for services *re* railway ties		24 20
	Refund of interest		312 51
	Outstanding cheque of 1893-94		31
	John Davidson, interest on timber dues		21 60
	Interest on invested capital		4,933 68
To	Charlotte Lamorandière, teacher, salary, 1st April, 1894, to 30th June, 1895	50 00	
	Josephine Bernard, teacher, salary, 1st April, 1894, to 20th October, 1894	143 93	
	John A. Wakegijig " " 14th July, 1894	59 24	
	Ignatius Gabow " " 31st March, 1895	200 00	
	James Keatley " " "	300 00	
	Sarah Bernard " from 1st Sept., 1894, to 31st March, 1895	119 24	
	Elizabeth Proulx, teacher, salary, from 1st Sept., 1894, to 31st Dec., 1894	75 38	
	Mrs. Chas. Rousseau, teacher, salary from 24th November, 1894, to 31st March, 1895	96 59	
	Thos. A. Miller, teacher, salary from 1st January, 1895, to 31st March, 1895	50 00	
	R. M. Stephen, M.D., physician, part of salary from 1st April, 1894, to 31st March, 1895	294 00	
	Jonas Oldjig, services as constable, 1st April, 1894, to 31st March, 1895	12 00	
	Isaac Shawana " " " "	12 00	
	J. T. White, inspection of schools	76 95	
	D. McCaig "	35 50	
	John Maguisk, repairing chimney	60	
	Mary Ann Corbier, cleaning West Bay school	75	
	Mary Ogemah, cleaning school	6 00	
	J. C. Irving & Co., tools, &c	18 67	
	A. Stewart, M.D., vaccine points	50 00	
	J. Gabow, broom for school	25	
	Dominion Express Co., freight charges	55	
	Ignatius Gabow, articles for school	30	
	George Borden, on account of liquor prosecution at Killarney	25 00	
	Alexander Neilson, express charges on galvanic battery	1 00	
	Chas. Potter, repairing galvanic battery	7 45	
	Blind River Lumber Co., refund on account of ground rent and renewal fee	44 40	
	E. L. Brayenor, articles for school	16 45	
	Louisa Maggrah, cleaning school-room	1 50	
	A. H. Johnston, medicines	42 84	
	B. W. Ross, for road-work	60 25	
	Provincial Board of Health, Ont., anti-toxine, &c., to R. M. Stephen, M.D.	17 00	
	Chas. Aissance, wood for school	15 00	
	B. W. Ross, repairs to Sucker Creek school-house	39 15	
	Joseph Wassijigig, wood for school	12 00	
	Simon Binisowabi "	21 00	
	Louis Corbier "	16 00	
	Carried forward	1,920 09	7,647 85

Ojibbewas and Ottawas of Manitoulin Island (No. 25)—*Concluded*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	1,627 95	7,647 85
INTEREST—*Concluded.*		
To Sarah Bernard, cleaning school-room	75	
W. A. McLeod, instructing Indians in taking out railroad ties	182 30	
Moses Manikos, wood for school	7 00	
Peter Bigomeasang "	7 00	
Annie Maggrah, cleaning school-room	1 50	
Chief Wm. Ogemah, wood for school	14 00	
Fred Obetosaway "	14 00	
Wm. Ogemah, whitewashing school-house	3 05	
A. P. Sherwood, advance for constable's expenses to Manitoulin Island	75 00	
Department of Public Printing and Stationery, school material	58 94	
O. Hinds, supplies for school	12 55	
Angus McQuaide, travelling expenses *re* liquor traffic	100 00	
Arrears of interest	354 68	
Relief for destitute	20 00	
Contingent account	18 80	
Salary of Lucy Shephard, teacher, from 1st April, 1894, to 31st March, 1895.	200 00	
Interest for distribution	3,714 86	
Indian Land Management Fund, for percentage on collections	56 14	
Balance, 30th June, 1895	886 29	
	7,647 85	7,647 85
By Balance, 30th June, 1895, brought down		886 29

Ojibbewas of Lake Huron (No. 26).

CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		48,000 00
To Balance, 30th June, 1895	48,000 00	
	48,000 00	48,000 00
By Balance, 30th June, 1895, brought down		48,000 00
INTEREST.		
By Balance, 30th June, 1894		135 23
Legislative Grant to pay Robinson treaty annuities		10,728 53
Refund of annuities of absentees		680 00
Refund on account of loan for relief of destitute		10 00
Wm. Van Abbott, refund on account of advance for travelling expenses		15 34
Interest on invested capital		2,404 72
To Wm. Van Abbott, for payment of annuity	3,236 00	
Thos. S. Walton do do	3,000 00	
B. W. Ross do do	6,760 00	
Wm. Van Abbott, travelling expenses in connection with payment of annuities	175 00	
Thos. S. Walton do do do	106 40	
B. W. Ross do do do	158 15	
Arrears of annuity to sundry Indians	488 00	
Balance, 30th June, 1895	50 27	
	13,973 82	13,973 82
By Balance, 30th June, 1895, brought down		50 27

Ojibbewas of Lake Superior (No. 27)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	40,000 00
To Balance, 30th June, 1895	40,000 00	
	40,000 00	40,000 00
By Balance, 30th June, 1895, brought down	.....	40,000 00
INTEREST.		
By Balance, 30th June, 1894	.....	7 24
Refund of annuity of absentees	.....	180 00
Legislative appropriation	.....	7,077 47
Interest on invested capital	.....	2,000 24
To J. P. Donnelly, for payment of annuity	7,272 00	
Wm. Van Abbott do do	1,320 00	
J. P. Donnelly, for expenses in connection with payment of annuity	429 85	
Arrears of annuity of absentees, 1893	48 00	
J. Fisher, services as clerk at annuity payments, 1894	142 90	
Expenses of two women to Pic Reserve	17 00	
Balance, 30th June, 1895	35 20	
	9,264 95	9,264 95
By Balance, 30th June, 1895, brought down	.....	35 20

Mississagua River Indians, Ont. (No. 28).

CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	6,208 43
Timber dues	.....	4 25
To B. W. Ross, advance for roadwork	100 00	
To Indian Land Management Fund, for percentage on collections	0 42	
Balance, 30th June, 1895	6,112 26	
	6,212 68	6,212 68
By Balance, 30th June, 1895, brought down	.....	6,112 26
INTEREST.		
By Balance, 30th June, 1894	.....	129 33
Rents collected	.....	41 40
Interest on invested capital	.....	221 80
To J. T. White, school inspection	9 45	
Louisa Dyke, cleaning school-room	2 50	
Interest for distribution	100 00	
Indian Land Management Fund, for percentage on collections	2 66	
Balance, 30th June, 1895	280 92	
	395 53	395 53
By Balance, 30th June, 1895, brought down	.....	280 92

Department of Indian Affairs

Oneidas of the Thames, Ont. (No. 29)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		568 10
To Balance, 30th June, 1895	568 10	
	568 10	568 10
By Balance, 30th June, 1895 brought down		568 10
INTEREST.		
By Balance, 30th June, 1894		59 47
Rents collected		277 50
Liquor fines		50 00
Interest on invested capital		22 00
To Elizabeth Schuyler, rent	11 67	
Elijah Ninham "	11 67	
Albert Sickles "	29 16	
Dolly Sickles "	67 50	
A. Stewart, M.D., vaccine points	10 00	
Henry Green, use of rooms for medical purposes	15 00	
Stephen Williams, for services assisting agent while taking census	5 00	
A. S. McDougal, rent	23 34	
Joshua Thomas, services as janitor	3 75	
Peter Pulford, lumber for culverts	10 00	
J. Dearness, inspecting schools	59 19	
Wm. H. Steeples, blackboard varnish	1 50	
John Carmichael, building Turkey Creek Bridge	50 00	
Charles McLeod, piles for bridge	7 50	
David Williams, wood for school	12 50	
Alexander McGregor, glass, &c., for school	1 85	
John Carmichael, timber for Turkey Creek Bridge	5 00	
A. Dingman, provisions for men working on road	3 00	
C. W. Vollick, fencing	15 00	
Henry Lockwood and J. M. Kaiser, J.P's., costs in liquor prosecution	5 30	
Indian Land Management Fund, for percentage on collections	19 65	
Balance, 30th June, 1895	41 39	
	408 97	408 97
By Balance, 30th June, 1895, brought down		41 39

Parry Island Indians, Ont. (No. 30)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		50,858 43
Thos. S. Walton, timber dues		546 15
To Indian Land Management Fund, for percentage on collections	54 61	
Balance, 30th June, 1895	51,349 97	
	51,404 58	51,404 58
By Balance, 30th June, 1895, brought down		51,349 97
INTEREST.		
By Balance, 30th June, 1894		307 67
Thos. S. Walton, fines for neglecting to send children to school		16 00
" " rents collected		82 00
" " refund of interest		13 39
Interest on invested capital		1,790 80
To Daniel Tebaubodong, chief, salary 1st April, 1894, to 31st March, 1895	50 00	
Pahbahmahwotong, salary, 1st April, 1894, to 31st March, 1895	20 00	
" gratuity for grandchild, 1st April, 1894, to 31st Mar., 1895	16 00	
Rev. A. Salt, secretary and interpreter, salary from 1st April, 1894, to 31st March, 1895	50 00	
Simon Chegaukoose, caretaker, salary, 1st April 1894, to 31st March, 1895	10 00	
Wm. King, caretaker, " " " " " " "	10 00	
Geo. Wahsagewong, messenger " " " " " " "	5 00	
John West, " " " " " " " "	5 00	
Mary Pace, teacher, " " " " " " "	250 00	
Mary Yates, teacher, " " " " 31st December, 1894	150 00	
Elizabeth Hayes, teacher, salary, 1st January, 1895, to 31st March, 1895	50 00	
Rev. Geo. Grant, inspecting schools	46 50	
The Parry Sound Lumber Co., provisions for destitute	51 80	
" " " " " material for fencing	11 35	
Walter Briggs, building stone foundation for Ryerson school	30 00	
Wm. Beatty, material for repairing school	7 37	
Alex. Logan, furniture for school	1 80	
Thos. S. Walton, expenses visiting Indian schools	1 00	
Charles Sinibah, wood for Indian schools	6 00	
Wm. Butler, flour for destitute Indians	23 00	
Department of Public Printing and Stationery, for school material	4 72	
Distribution of interest	1,085 44	
Indian Land Management Fund, for percentage on collections	5 88	
Balance, 30th June, 1895	319 00	
	2,209 86	2,209 86
By Balance, 30th June, 1895, brought down		319 00

Department of Indian Affairs.

Pottawattamies of Walpole Island, Ont. (No. 31)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	6,207 52
To Balance, 30th June, 1895	6,207 52	
	6,207 52	6,207 52
By Balance, 30th June, 1895, brought down	.....	6,207 52
INTEREST.		
By Balance, 30th June, 1894	.....	102 49
Rents	.....	431 65
A. McKelvey, refund of amount paid West & Davis	.....	1 14
" " pension	.....	1 00
" " interest	.....	96
" " on account of loan for purchase of seed-grain	.....	19 66
Amount of outstanding cheques for 1892-93	.....	3 25
Interest on invested capital	.....	220 88
To Ashkebee, chief, salary, 1st April, 1894, to 31st March, 1895	20 00	
Joseph Isaacs, councillor, salary, 1st April, 1894, to 31st March, 1895	10 00	
Lightning Dodge " " " "	10 00	
Wm. Peters, secretary " " 31st December, 1894	7 50	
Wm. Souie " 1st Jan., 1895, to 31st March, 1895	2 50	
John Day, making coffins 1st April, 1894, to "	10 00	
Joseph Isaacs " " " "	10 00	
Jos. Thomas, sexton " " " "	10 00	
Samuel White, pathmaster, year 1893	2 00	
John Day " "	2 00	
Saugutchewaqua, pension, 1st April, 1894, to 31st March, 1895	4 00	
Peshana " " "	4 00	
Goonah " " "	4 00	
Pwaqueence " " "	4 00	
Tagwagewon " " "	4 00	
Mayanashe " " "	4 00	
Menoquot " " 30th June, 1894	1 00	
Geo. Mitchell, M.D., physician, salary, 1st April, 1894, to 31st March, 1895	125 00	
John Yahnodt, services as forest bailiff for year 1894	21 37	
Chas. Kiyoshk, services while census-taking	2 00	
Andrew Isaacs, teaming	1 50	
Jos. Wilson, material for bridge	10 23	
Geo. Isaacs, repairing school fence	3 00	
Jos. Isaacs, cleaning school-room	1 50	
Shaw & Wooliver, sundries	56	
Chas. London, funeral furnishings	17 00	
David Day, digging graves	3 75	
John Brebner, inspecting schools	24 89	
J. H. Fraser, repairing No. 2 School	50 00	
" lumber	3 32	
Shaw & Wooliver, hardware	2 43	
West & Davis, hinges and screws	13	
Elijah Souie, glazing windows	50	
Chief Ashkebee, cleaning school-room	1 50	
John Shaver " "	1 75	
Chief Ashkebee, wood for school	8 00	
Riddel & Shambleau, insurance premium on council-house	4 50	
Relief to destitute	4 00	
Alex McKelvey, interest for distribution	300 00	
Indian Land Management Fund, for percentage on collections	25 90	
Balance, 30th June, 1895	59 20	
	781 03	781 03
By Balance, 30th June, 1895, brought down	.....	59 20

Serpent River Indians, Ont. (No. 32)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		5,055 91
Timber dues		20 64
"		39
To Indian Land Management Fund, for percentage on collections.	2 10	
Balance, 30th June, 1895	5,074 84	
	5,076 94	5,076 94
By Balance, 30th June, 1895, brought down		5,074 84
INTEREST.		
By Balance, 30th June, 1894		601 04
B. W. Ross, rents collected		420 00
Spanish River, account for cheques 1139 and 1162 transferred		65 00
Refund of interest		32 90
Interest on invested capital		198 00
To J. F. White, inspecting schools	19 75	
A. Pelekey, for repairs to school-house	50 00	
Antoinie Caigwaitch, wood for school	15 00	
Tebisciojigeg "	4 00	
Paul Cada "	3 00	
B. W. Ross, plough and freight on same	11 00	
Interest for distribution	463 40	
Indian Land Management Fund, for percentage on collections	25 20	
Balance, 30th June, 1895	725 59	
	1,316 94	1,316 94
By Balance, 30th June, 1895, brought down		725 59

Department of Indian Affairs

Six Nations of the Grand River, Ont. (No. 33)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		894,030 76
Land sales		412 68
Stone dues		83 00
Timber dues		13 40
Refund by J. F. Martin on account of loan		20 20
To Loan to Wm. Smith	400 00	
" A. H. Lottridge	150 00	
" A. G. Smith	500 00	
" John M. Curley	200 00	
" John Russell	150 00	
" Isaac Green	140 00	
" A. Bumberry	400 00	
" D. Doxtater	100 00	
" A. S. Johnson	250 00	
" Peter Powless	300 00	
" Festus Johnson	300 00	
" Geo. W. Hill	250 00	
" Charlotte Hill	200 00	
" Augustus Jamieson	90 00	
" Jeremiah Hill	150 00	
" Mrs. Eve Martin	50 00	
" Elliott Obediah	50 00	
" Jacob Millar	500 00	
" David Sunday	200 00	
Percentage on collections carried to credit of Indian Land Management Fund	50 91	
Balance, 30th June, 1895	890,129 13	
	894,560 04	894,560 04
By Balance, 30th June, 1895, brought down		890,129 13
INTEREST.		
By Balance, 30th June, 1894		11,344 19
Rents		1,785 00
Collections on account of road-work		46 75
E. D. Cameron, refund interest sent for distribution		220 75
" " amount unexpended on account of bush fires		50
J. Lewis, refund on account of loan		10 00
E. D. Cameron, refund of amount collected from J. Green for burying dead horse		8 00
Outstanding cheque, No. 4168, 1892-93		2 00
Interest on invested capital		47,319 00
To R. H. Dee, M.D., superannuation allowance	500 00	
E. D. Cameron, rent and travelling expenses from 1st April, 1894, to 31st March, 1895	340 00	
Wm. Reep and David Hill, chiefs' board allowance from 1st April, 1894, to 31st March, 1895	800 00	
J. A. Langrill, physician, salary, 1st July, 1894, to 30th June, 1895	2,000 00	
W. J. Langrill, assistant physician, salary, 1st July, 1894, to 30th June, 1895	850 00	
Wm. Reep, interpreter, salary, 1st July, 1894, to 30th June, 1895	399 97	
John John, caretaker, salary, 1st April, 1894, to 31st March, 1895	44 00	
Josiah Hill, secretary " " "	400 00	
Wm. Wage, forest bailiff " "	130 00	
Moses Turkey " "	130 00	
Geo. Longboat " "	130 00	
David Hill, pension " "	30 00	
John Gibson " " "	50 00	
Peter Leaf " " "	25 00	
S. Harris " " "	25 00	
Lawrence Thomas " " "	25 00	
Wm. Jack " " "	25 00	
Sampson Green " " "	25 00	
Solomon Nash " " "	25 00	
Jacob Green " " "	25 00	
Betsey Claus " " "	25 00	
Carried forward	6,003 97	60,736 19

Six Nations of the Grand River (No. 33)—*Continued*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	6,003 97	60,736 19
INTEREST—*Continued.*		
To Esther Powles, pension, 1st April, 1894, to 31st March, 1895	25 00	
Hannah Ahgwaga " " "	25 00	
William Curley " " "	25 00	
Elizabeth Fun " " "	25 00	
Elizabeth Nash " " "	25 00	
Susannah Jamieson " " "	25 00	
Louis Bumberry " " "	25 00	
Abram S. Hill " " "	25 00	
Isaac Smith " " "	25 00	
Christine Walker " " "	25 00	
Robert Hill " " "	25 00	
John House " " "	25 00	
Wm. L. Green " " "	25 00	
John Key " " "	50 00	
Jas. S. Johnson " " "	50 00	
Eliza Nash " " "	25 00	
Isaac Thomas " " "	25 00	
Mary L. Green " " "	25 00	
Samuel Hill " " "	25 00	
Moses Mount " " 31st December, 1894	18 75	
Jas. Peters " " 31st March, 1895	25 00	
Wm. Martin " " 31st December, 1894	18 75	
Elizabeth Williams " " 31st March, 1895	25 00	
John Davis " " 30th June, 1894	3 00	
O. B. Osborn, M.D., attendance on Clara Jamieson	21 00	
Elizabeth Jacobs, pension, 1st Apr l, 1894, to 31st March, 1895	25 00	
Jacob Jamieson " " "	50 00	
Seth Johnson, " " "	25 00	
John Snow " 1st July, 1894, to 31st March, 1895	18 75	
Samuel Butler, services putting out bush fires	8 00	
Adam Hill " "	8 00	
John Froman " "	5 00	
Hiram Miller, tiles for ditch	4 25	
James B. Hill, work on ditch	29 00	
Isaac Davis, inspecting fire loss	13 00	
Nicodemus Porter, "	8 00	
Benjamin Carpenter, services on committee	1 00	
Joab Martin "	1 00	
John Hill "	3 00	
Levi Jonathan "	1 00	
Nicodemus Porter "	2 00	
Joseph Green "	3 00	
Wm. Wage "	1 00	
D. Doxtater "	1 00	
Josiah Hill "	3 00	
P. Powles "	2 00	
Philip Hill "	3 00	
Joseph Porter "	2 00	
Elias Lewis "	5 60	
W. C. Hill "	1 00	
David General "	3 00	
J. S Johnson "	6 00	
Richard Hill "	7 00	
Moses Hill "	3 00	
G. W. Hill "	1 00	
George Key "	4 00	
Wm. Echo "	4 00	
Abraham Charles "	4 00	
J. S. Johnson, meals for committee	2 50	
J. W. M. Elliott, copying quit-claims	6 00	
D. Thomas, expenses executing quit-claims	4 00	
Carried forward	6,907 97	60,736 19

Six Nations of Grand River (No. 33)—*Continued*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	6,907 97	60,736 19
INTEREST—*Continued.*		
To David Thomas, trustee	8 00	
A. Jamieson "	8 00	
Josiah Hill "	8 00	
G. A. Martin, services as fence-viewer	3 00	
J. Jonathan "	3 00	
Job Martin, fees for attending school meeting	4 00	
Wm. Smith " "	4 00	
J. S. Johnson " "	4 00	
L. Givens, rent	125 00	
John R. Davis, rent	150 00	
John and Sarah Warner, rent	185 00	
G. W. Longboat, rent	230 00	
J. S. Johnson "	160 00	
Julia Garlow "	70 00	
Estate I. Duncan "	200 00	
Mary P. Maracle "	30 00	
Thos. A. Miller "	60 00	
Mary and Lydia Hill, rent	25 00	
Joseph Henry "	150 00	
Joshua Williams "	125 00	
Josiah Hill "	150 00	
Geo. D. Styers "	100 00	
Jacob Green "	100 00	
Margaret Beaver "	125 00	
Mrs. P. Gordon, arrears of interest	5 05	
Margaret Burning "	5 05	
Jos. Woodruff "	5 05	
H. Funn "	5 05	
Augustus Martin "	10 10	
R. Atkins "	20 20	
W. General "	5 05	
P. Cusick "	30 10	
L. Clench "	5 05	
J. Green "	5 05	
Elizabeth Walker "	5 05	
Lewis David "	5 05	
P. J. Turkey " from spring, 1888, to fall, 1894	66 55	
Hannah David "	5 05	
Robt. Hill " and pension	55 20	
Geo. Longfish, care of Julia Otter	10 00	
Moses Hill, building culvert	23 00	
J. A. Shaver, lumber for culverts	184 60	
Wm. Hill, building bridge	45 00	
Joseph Henry "	45 00	
Elias Styers "	125 04	
J. S. Johnson, repairs to bridge	21 00	
Abram Henry, building bridge	65 00	
N. Porter "	35 00	
Levi Jonathan, building culvert	45 00	
" " bridge	45 00	
" repairs to bridge	40 00	
Henry Burning "	28 00	
Festus Johnson, building council-house shed	290 00	
Joseph Porter, repairs to race track	90	
J. R. Vanfleet, lumber for culverts	200 05	
Abram Charles, repairs to Lower Cayuga Longhouse	25 00	
Levi Jonathan, trees for council-house grounds	18 50	
D. McGregor, road-scrapers	93 00	
Wm. John, road-leveller	7 00	
Stationery	3 70	
Carried forward	10,517 41	60,736 19

Six Nations of Grand River (No. 33)—*Continued*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	10,517 41	60,736 19
INTEREST—*Continued.*		
To J. Williams, grant to Pagan celebration	15 00	
Jas. Green " temperance committee	25 00	
R. H. Green, M.D., attendance on I. Roundsky	5 00	
Mrs. L. Nash, arrears of interest	15 85	
G. B. Salmond, blinds, &c., for Thomas school	12 20	
J. A. Langrill, M.D., repairs to residence	25 05	
" repayment of amount paid for removal of dead horse.	8 00	
Bell Telephone Co., rent of telephone	30 00	
E. D. Cameron, expenses putting out bush fires	251 50	
" interest for distribution	36,000 00	
Geo. Henhawk, repairs to roads	16 00	
British American Assurance Co., renewal of policy No. 358,582	45 00	
" " " " 276,940	20 00	
W. M. Stanley, M.D., operation on C. Green's eye	7 00	
Joel Ward, services as stenographer	21 00	
L. McTaggart, "	18 00	
A. Stewart, M.D., vaccine	5 00	
James Grace, legal services *re* conviction of Aaron H. Burning	7 55	
M. J. Kelly, inspecting schools	142 00	
Rev. R. Ashton, grant to schools	1,500 00	
John Miller, teacher, salary, 1st April, 1894, 31st March, 1895	362 52	
J. S. Johnson, funeral furnishings	360 00	
Wm. Pierce, "	15 00	
A. H. Lottridge, "	190 00	
Avery Bros., "	25 00	
Jacob Miller & Co., relief supplies to destitute and sick	30 00	
William Rannie, " " "	3 00	
J. S. Johnson, " " "	207 00	
C. E. Courtnage, " " "	11 00	
A. H. Lottridge, " " "	7 00	
J. S. Johnson, sundry supplies	30 61	
A. E. Hill, services as fence-viewer	21 00	
A. H. Lottridge, " "	21 00	
David Van Every, compensation for loss by fire	27 33	
Philip Miller " " "	141 88	
Margaret Bumberry " " "	30 00	
Benjamin Garlow " " "	30 00	
Lucinda Scott " " "	36 66	
Joseph Farmer " " "	90 00	
John Buck " " "	35 61	
Margaret Lickers " " "	2 00	
Mrs. A. Walker Hill " " "	3 30	
John Burnhouse, services protecting bridges	2 00	
John Silversmith " "	2 00	
Andrew Sky " "	2 00	
David Sky " "	1 00	
George Key " "	1 00	
George Silversmith " "	1 00	
Josiah Hill, travelling expenses	52 90	
" inspecting roads	15 00	
J. S. Johnson, chairs for Thomas school	2 00	
P. H. Burning, building bridge and culvert, Spring Creek	318 00	
Dominion Express Co., freight	1 40	
Lewis Merrill, opening ditch	63 20	
J. W. Pattison, funeral furnishings	45 00	
Clifford & Wood "	50 00	
N. Monture "	5 00	
J. B. Burrows "	20 00	
A. W. Johnson "	10 00	
H. Sutherland "	10 00	
D. W. Williams "	15 00	
Carried forward	50,982 97	60,736 19

Six Nations of Grand River (No. 33)—*Continued*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	50,982 97	60,736 19
INTEREST—*Continued.*		
To Nelson Moses, funeral furnishings	5 00	
Susannah Bumberry "	10 00	
Heaslip Bros. "	20 00	
Jas. Jones "	10 00	
Fisher Johnson, relief to destitute	28 00	
George Miller " "	4 00	
D. S. Sayer, spectacles for John Yellow	5 00	
John A. Langrill, M.D., medicines	299 52	
A. G. Smith, for sheep killed by dogs	7 98	
P. Powless " "	2 66	
Geo. D. Styers, grant to ploughing match	70 00	
J. R. Vanfleet, lumber	25 00	
Elijah Powless, loan to Victoria brass band	72 00	
Rev. J. Lennant, grant to Baptist church	25 00	
Howie & Feely, stovepipes for office	8 60	
L. Obe, claim against Mrs. M. Doxtater	25 00	
Josiah Hill, grant to Xmas tree, Thomas school	10 00	
L. Jonathan, fruit for World's Fair	3 00	
J. Miller & Co., stovepipes for council-house	5 80	
N. Porter, putting up stove	5 50	
S. Curley, loan to complete dwelling	80 00	
John Hill, repairs to desk in council-house	1 00	
Mrs. A. Isaac, wood for council-house	13 50	
P. Newhouse, services as constable at interest payments	10 50	
Chas. E. Martin, " " "	4 50	
Herbert Smith, " "	6 00	
Abram Garlow, " " "	4 50	
A. H. Lottridge, board of constables	6 75	
Jas. Grace, J.P., costs in liquor cases	18 70	
J. W. M. Elliott, census list of children	7 00	
J. Davis, searching for wampum	50 00	
S. Adams, services, fire detective	6 00	
D. Garlow, " constable	10 30	
Repairs to school-house	25 00	
John H. Stratford Hospital, care and attendance Dorothy Sero	3 20	
A. Spragg, wood for Thomas school	7 00	
John Fair, repairs to compass	2 00	
Festus Johnson, repairs to road-scraper	20 90	
Levi Jonathan, telegram	25	
Isaac Davis, "	38	
David S. Hill, services on committee	1 00	
Elijah Powles, " "	1 00	
T. A. Snider, legal services *re* Grand River Navigation Co.	190 00	
School material	15 88	
John Johnson, horses for Elias Maracle	70 00	
John McHutchi-n, supplies, Queen's birthday celebration	74 00	
Mrs. Josiah Hill, meals for band	3 00	
John House, services as flagman	50	
R. H. Constable, printing notices	1 75	
E. D. Cameron, prizes, Queen's birthday celebration	33 25	
Advance to G. Davis to pay passage from England to Brantford	37 59	
Percentage on collections carried to credit of Indian Land Management Fund	107 10	
Balance 30th June, 1895	8,298 61	
	60,736 19	60,736 19
By Balance, 30th June, 1895, brought down	.....	8,298 61

Shawanaga Indians, Ont. (No. 34)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		10,116 13
To Balance, 30th June, 1895	10,116 13	
	10,116 13	10,116 13
By Balance, 30th June, 1895, brought down		10,116 13
INTEREST.		
By Balance, 30th June, 1894		155 92
Interest on invested capital		359 52
To Adam Pawis, chief, salary, 1st April, 1894, to 30th June, 1894	5 00	
Francis Nebininaugquod, salary as chief, 1st July, 1894, to 31st March, 1895	15 00	
Mary C. Harrison, teacher, salary, 1st April, 1894, to 31st March, 1895	75 00	
Geo. Grant, inspecting schools	22 00	
Ed. Gauvreau, M.D., vaccine points	3 35	
Department Public Printing and Stationery, school material	3 24	
Express charges on school material	25	
Interest due M. C. Cameron	200 00	
Balance, 30th June, 1895	191 60	
	515 44	515 44
By Balance, 30th June, 1895, brought down		191 60

Spanish River Indians, Ont. (No. 35)

CAPITAL.		
By Balance, 30th June, 1894		6,541 35
Timber dues		9 49
To Indian Land Management Fund, for percentage on collections	95	
Balance, 30th June, 1895	6,549 89	
	6,550 84	6,550 84
By Balance, 30th June, 1895, brought down		6,549 89
INTEREST.		
By Balance, 30th June, 1894		84 41
Interest on invested capital		231 92
Rent		120 00
Amount of outstanding cheque, 1892-93		3 50
To R. M. Stephen, M.D., physician, part of salary from 1st April, 1894, to 31st March, 1895	78 36	
J. T. White, inspecting schools	2 00	
D. McCaig " "	9 50	
J. C. Irving & Co., potato sacks	1 84	
Caroline Morley, cleaning school-room	3 00	
Francis Shobikezhik, wood for school	9 00	
John Pahtwahwedung "	9 00	
Joseph Maiosegyik "	10 00	
John Gadabashe "	5 00	
McKeon & Glover, lumber	7 20	
H. Sadowski, hardware	1 33	
Oshkenahwo, repairs to school-house	12 00	
A. Pelkey " "	50 00	
A. Cadotte, sundries for "	1 25	
Antoine Caigwaitch, wood for school-house	15 00	
A. M. Ironside, contingent account	6 26	
Department Public Printing and Stationery, school material	2 60	
Indian Land Management Fund, for percentage on collections	7 20	
Balance, 30th June, 1895	209 29	
	439 83	439 83
By Balance, 30th June, 1895, brought down		209 29

Department of Indian Affairs.

Thessalon River Indians, Ont. (No. 36)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		18,528 76
Land sales		1,390 92
To Sam. Hagan, grant for constructing bridge	400 00	
Indian Land Management Fund, for percentage on collections	139 09	
Balance, 30th June, 1895	19,380 59	
	19,919 68	19,919 68
By Balance, 30th June, 1895, brought down		19,380 59
INTEREST.		
By Balance, 30th June, 1894		560 04
Interest on invested capital		668 08
To J. T. White, inspecting schools	19 25	
A. McGill & Son, desks for schools	28 00	
Joseph Bayaillon, wood "	15 00	
Wm. Thompson and Wm. Horne, expenses of liquor prosecution	3 60	
Arrears of interest to sundry Indians	51 69	
Distribution of interest	422 50	
Department Public Printing and Stationery, school material	3 90	
Balance, 30th June, 1895	684 18	
	1,228 12	1,228 12
By Balance, 30th June, 1895, brought down		684 18

Tootoomenai's Band, Ont. (No. 37)

CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		900 00
To Balance, 30th June, 1895	900 00	
	900 00	900 00
By Balance, 30th June, 1895, brought down		900 00
INTEREST.		
By Balance, 30th June, 1894		149 30
Interest on invested capital		59 24
Balance, 30th June, 1895	208 54	
	208 54	208 54
By Balance, 30th June, 1895, brought down		208 54

Whitefish River Indians, Ont. (No. 38)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts.	$ cts.
By	Balance, 30th June, 1894		14,317 66
	Balance, 30th June, 1895	14,317 66	
		14,317 66	14,317 66
	Balance, 30th June, 1895, brought down		14,317 66
	INTEREST.		
By	Balance, 30th June, 1894		525 55
	Rents collected		92 00
	Interest on invested capital		519 52
To	R. M. Stephen, M.D., part salary 1st April, 1894, to 31st March, 1895	23 52	
	James Nowegahbow, chief, " " "	50 00	
	Thos. Wilkins, sr., services as constable 8th Oct., 1894, to 31st March, 1895	57 43	
	D. McCaig, inspecting schools	9 00	
	B. H. Turner, sundry articles for school	3 90	
	" lumber " "	98 71	
	A. McGill & Son, bell " "	16 00	
	David Nowegahbow, wood " "	14 50	
	Department Public Printing and Stationery, school material	15	
	Interest for distribution	464 16	
	Indian Land Management Fund, for percentage on collections	5 52	
	Balance, 30th June, 1895	394 18	
		1,137 07	1,137 07
By	Balance, 30th June, 1895, brought down		394 18

Wyandottes of Anderdon, Ont. (No. 39)

	CAPITAL.	$ cts.	$ cts.
By	Balance, 30th June, 1894		15,118 48
	Land sales		1,702 00
To	M. K. Cowan, refund of over-payment on land	150 00	
	Louis Warrow, share of capital	13 81	
	Indian Land Management Fund, for percentage on collections	155 20	
	Alex. Clarke and wife, in January, 1892, and December, 1893, distribution of capital	151 70	
	Geo. G. Clarke, shares of self and wife in January, 1892, and December, 1893, distribution of capital	55 24	
	Balance, 30th June, 1895	16,294 53	
		16,820 48	16,820 48
By	Balance, 30th June, 1895, brought down		16,294 53
	INTEREST.		
By	Balance, 30th June, 1894		4,104 60
	A. English, refund of interest		60 00
	Interest on invested capital		1,064 64
To	Assumption College, board and tuition of Justin Clarke	79 50	
	E. P. Watson, services *re* measuring water lots	50 60	
	Interest for distribution	400 00	
	Balance, 30th June, 1895	4,699 14	
		5,229 24	5,229 24
By	Balance, 30th June, 1895, brought down		4,699 14

Department of Indian Affairs

Abenakis of St. Francis, P.Q. (No. 40)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	3,736 51
To Balance, 30th June, 1895	3,736 51	
	3,736 51	3,736 51
By Balance, 30th June, 1895, brought down	.....	3,736 51
INTEREST.		
By Balance, 30th June, 1894	.....	378 28
Rents collected	.....	268 71
A. A. Mondou, for bull sold	.....	13 00
Liquor fines	.....	39 00
Refund of interest	.....	1 18
Interest on invested capital	.....	151 68
To P. E. Robillard, relief to destitute	7 00	
Hon J. S. Hall, Q.C., professional services	13 99	
Dominion Express Co., freight charges	85	
Mrs. O. Lachappelle, cleaning school-house	4 00	
Jos. Portneuf, repairs to bridge	1 40	
Beauchemin & Frère, material for bridge	2 11	
Louis Gill, bull supplied	14 00	
Israel Verville, wood for school	18 00	
F. Pitt, for services during liquor trial	9 45	
H. Pitt " "	2 95	
A. Schooner & Co., sundries for school	5 09	
A. P. Sherwood, travelling expenses of constable *re* liquor traffic	50 00	
Ed. Rouillard & Son, wood for school	15 25	
Joseph Laurent, expenses, Pierreville to Ottawa and return	10 90	
J. E. Belcourt, inspecting schools	10 00	
A. Laperriere & Frères, funeral furnishings	1 50	
Moïse Descoteau, coffin	8 50	
Joseph Portneuf, repairs to bridge	3 00	
H. Pitt, legal services in liquor prosecutions	36 70	
Beauchemin & Frère, lumber for bridges	6 15	
John Tahamont, work on bridge	4 25	
Laperriere & Frères, nails, etc., for bridge	59	
Joseph Côté, work on road	21 90	
H. L. Masta, travelling expenses to Ottawa and return	34 65	
Chief J. Portneuf, services *re* liquor traffic	5 00	
Pierre Obumsawin, funeral expenses	5 00	
Relief to destitute	9 00	
Department of Public Printing and Stationery, school material	71 12	
H. Giroux, balance for services as constable	48	
Beauchemin & Frère, for lumber	9 80	
Interest for distribution	375 00	
Indian Land Management Fund, for percentage on collections	19 25	
Balance, 30th June, 1895	74 97	
	851 85	851 85
By Balance, 30th June, 1895, brought down	.....	74 97

Abenakis of Becancour, P.Q. (No. 41)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	906 60
To Balance, 30th June, 1895	906 60	
	906 60	906 60
By Balance, 30th June, 1895, brought down	.....	906 60
INTEREST.		
To Balance, 30th June, 1894	50 62	
By Interest on invested capital	.....	29 96
Balance, 30th June, 1895	.....	20 66
	50 62	50 62
To Balance, 30th June, 1895, brought down	20 66	

Amalecites of Isle Verte and Viger, P.Q. (No. 42).

CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	7,332 35
Land sales	.....	387 30
To Indian Land Management Fund, for percentage on collections	38 73	
Balance, 30th June, 1895	7,680 92	
	7,719 65	7,719 65
To Balance, 30th June, 1895, brought down	.....	7,680 92
INTEREST.		
By Balance, 30th June, 1894	.....	74 41
Refund of interest	.....	13 35
Interest on invested capital	.....	259 24
To Interest for distribution	240 00	
Balance, 30th June, 1895	107 00	
	347 00	347 00
By Balance, 30th June, 1395, brought down	.. ....	107 00

Department of Indian Affairs.

Golden Lake Indians, Ont. (No. 43)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		49 92
O. A. & P. S. Railway, right of way		6 00
To Indian Land Management Fund, for percentage on collections	0 60	
Balance, 30th June, 1895	55 32	
	55 92	55 92
By Balance, 30th June, 1895, brought down		55 32
INTEREST.		
By Balance, 30th June, 1894		6 68
O. A. & P. S. Railway, improvements on land taken for right of way		88 31
Interest on invested capital		1 96
To sundry Indians as compensation for improvements	78 31	
J. T. White, inspecting schools	9 05	
Indian Land Management Fund, for percentage on collections	5 30	
Balance, 30th June, 1895	4 29	
	96 95	96 95
By Balance, 30th June, 1895, brought down		4 29

Hurons of Lorette, P.Q. (No. 44)

CAPITAL.		
By Balance, 30th June, 1894		4,230 55
To Balance, 30th June, 1895	4,230 55	
	4,230 55	4,230 55
By Balance, 30th June, 1895, brought down		4,230 55
INTEREST.		
By Balance, 30th June, 1894		213 02
E. Gauvreau, M.D., refund of payment for vaccine		0 50
Interest on invested capital		155 52
To Daniel Groslouis, repairing gun carriage	8 00	
Gabriel Belleau, powder for Queen's birthday celebration	2 80	
Dominion Express Co., express charges	0 40	
C. Renaud, tuition of six Indian children, St. Ambroise school	6 00	
Cyprien Vincent, relief grants	63 00	
A. O. Bastien, relief for sundry destitute Indians	25 00	
Department of Public Printing and Stationery, school material	27 00	
Balance, 30th June, 1895	236 84	
	369 04	369 04
By Balance, 30th June, 1895, brought down		236 84

Iroquois of Caughnawaga, P.Q. (No. 45)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ ct
By Balance, 30th June, 1894		12,695 37
Timber dues		172 25
Stone dues		86 00
To Toussaint Daillebout, repairs to gatekeeper's house	6 00	
Chas. X. Giasson " "	1 50	
Michel Lacombe, lumber for gatekeeper's house	17 50	
Michel Delisle, material " "	4 18	
Louis Faironiote " " "	4 00	
F. Baillargeon " " "	43 80	
Jarvis Daillebout, lumber " "	2 25	
J. A. McMartin & Co., fire engine and hose	500 00	
Indian Land Management Fund, for percentage on collections	25 82	
Balance, 30th June, 1895	12,348 57	
	12,953 62	12,953 62
By Balance, 30th June, 1895, brought down		12,348 57
INTEREST.		
By Charlemagne and Lake Ouareau Lumber Co. for ground rent		159 34
A. Brosseau, rent collections		2,572 87
Interest on invested capital		124 52
To Balance, 30th June, 1894	9,879 83	
Jarvis Daillebout, gatekeeper, salary from 1st January to 31st Dec., 1894	24 00	
Thos. Hill " " " "	24 00	
Nap. A. Giasson, measuring stone	11 28	
Bank of Montreal, to pay cheque 43262 of 1890-91	0 80	
Cole's National Manufacturing Co., 1 flag	11 25	
J. M. Jocks, expenses to Montreal *re* fire engine	18 00	
Pierre Causdière " "	12 00	
L. F. Jackson " "	12 00	
A. Matté, services *re* collection seigniorial rents	12 75	
Pierre Prevost " " "	0 50	
A. Thomas " " "	0 50	
F. T. Langevin " " "	0 75	
Louis Beauvais " "	2 00	
L. M. Jocks, rent paid by O. Guerin	50 00	
Michael Jacob, rent for benefit of children of the late White Eagle	55 00	
Moïse Lefort, services as constable, 1st July, 1891, to 30th June, 1892	91 25	
Mitchel Katsenhaien, rent, March, 1895	65 00	
Pierre Tinheonton, services of brass band	15 00	
Moïse Stacy, services as crier	2 00	
Pierre Canadien, repairs to school building	10 00	
Pierre Murray, services as interpreter	5 00	
Moïse Tahentetha, giving notice of election at church door	1 00	
Dr. A. O. Patton, vaccinating Indians	5 50	
Can. Atlantic Ry., two 2nd-class tickets to Montreal for destitute Indians	5 00	
Percentage on collections carried to credit of Indian Land Management Fund	163 93	
By Balance, 30th June, 1895		7,621 61
	10,478 34	10,478 34
To Balance, 30th June, 1895, brought down	7,621 61	

Department of Indian Affairs.

Iroquois of St. Regis, P.Q. (No. 46)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		54,629 58
Geo. Long, collections for sand		59 00
To Percentage on collections carried to credit of Indian Land Managem't Fund	5 90	
Balance, 30th June, 1895	54,682 68	
	54,688 58	54,688 58
By Balance, 30th June, 1895, brought down		54,682 68
INTEREST.		
By Balance, 30th June, 1894		861 24
Geo. Long, rents collected		203 00
Interest on invested capital		2,592 16
To A. McNaughton, school inspection	14 00	
Rev. M. Mainville, salary from 1st April, 1894, to 31st March, 1895	100 00	
" allowance for fuel	25 00	
" " hay	28 00	
Mary J. Powell, teacher, salary, 1st April, 1894, to 31st March, 1895	200 00	
Margaret McKillop " " "	200 00	
Josephine McKillop " 1st April to 30th June, 1894	50 00	
Christina McKillop " 1st July, 1894, to 31st March, 1895	150 00	
Annie Back " 1st April, 1894, to 31st March, 1895	200 00	
Geo. Long, to complete road-work at St. Regis village	15 28	
Loran Cook, repairing road	10 00	
L. A. Ross, lumber, nails, &c., for repairs to road	5 50	
Geo. Long, freight on lumber to repair road	0 50	
Louis Smoke, services as sexton, 15th April to 15th July, 1894	18 00	
M. A. White, repairs at St. Regis school	23 33	
Campbell Bros., repairs to stoves, &c.	5 96	
Loran Pike, services as clerk, 1st April to 1st Oct., 1894	5 00	
Louis Friday, arrears of interest for fall of 1893	1 65	
S. G. Grow, coal for schools	68 75	
Mitchell Jacob, freighting coal to Chenail school	3 00	
L. A. Ross, lumber for bridging	6 86	
Cameron & McDonald, provisions for road labourers	8 14	
Loran Pike, expenses of deputation to Ottawa	12 00	
Mitchell Jacobs, expenses from Ottawa to St. Regis	6 00	
Peter Hops, carting coal to school	2 63	
Loran Pike, services as interpreter	3 00	
Department of Public Printing and Stationery, school material	20 72	
Wm. A. Grant, coal for schools, Cornwall Island	53 51	
Loran Pike and Thos. White, expenses to Ottawa and return to St. Regis	10 50	
J. T. White, school inspection	9 55	
James McGregor, school inspection, Dundee	12 25	
Campbell Brothers, sundries for schools	3 09	
W. Powell, paid for labour at St. Regis school	4 00	
John Angus, repairing foundation, St. Regis school	3 00	
Wm. Powell, wood for St. Regis school	5 00	
Peter Square, loan to assist him to return to St. Regis	1 00	
John Angus, expenses, St. Regis to Ottawa	1 85	
Mitchell George " "	10 05	
Allen S. Matthews, stove pot casting for R. C. school on Cornwall Island	4 71	
W. P. Lett, part of fine imposed upon John Deer, jr	4 00	
D. C. Scott, cash for destitute Indians	2 00	
Geo. Long, relief of John Angus	5 00	
Maintenance of Nancy Skin, St. Jean de Dieu asylum	50 00	
Wm. Powell, glazing windows	1 50	
M. A. White, repairs to church	3 00	
Alex. McDonald, coffin	6 00	
Fare to Smith's Falls for Joe Maurice	1 25	
Mitchell Jacob, chief, salary year ended 28th February, 1895	10 00	
Mitchell Friday " "	10 00	
Mitchell Bova " "	10 00	
Carried forward	1,404 58	3,656 40

Iroquois of St. Regis, P.Q. (No. 46)—*Continued*

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Brought forward	1,404 58	3,656 40
INTEREST—*Continued.*		
Jake Fire, salary for year ended 28th February, 1895	10 00	
Loran Pike, salary as clerk for half year ended 1st April, 1895	5 00	
M. Jacobs, expenses to Ottawa and return to St. Regis	6 00	
Sarah Friday, organist St. Regis church	10 00	
Agnes Adams, expenses from Ottawa to St. Regis	5 00	
A. Stewart, M.D., vaccine points supplied Geo. Long	5 00	
Mitchell George, labour at Chenail school	2 00	
Percentage on collections carried to credit of Indian Land Managem't Fund	12 18	
Amount transferred to Land Fund	2,196 64	
	3,656 40	3,656 40

Iroquois of St. Regis, P.Q., Land Fund (No. 46a).

	CAPITAL.		
By	Balance 30th June, 1894		2,373 16
	Interest		83 04
	Amount transferred from interest of general account		2,196 64
To	John Davidson, secretary-treasurer, township Dundee commutation tax	170 67	
	Balance, 30th June, 1895	4,482 17	
		4,652 84	4,652 84
By	Balance, 30th June, 1895, brought down		4,482 17

Lake St. John Indians, P.Q. (No. 47).

	CAPITAL.		
By	Balance, 30th June, 1894		1,865 11
	Land sales		256 79
	Timber sales		32 10
To	Percentage on collections carried to credit of Indian Land Managem't Fund	28 89	
	Balance, 30th June, 1895	2,125 11	
		2,154 00	2,154 00
By	Balance, 30th June, 1895, brought down		2,125 11
	INTEREST.		
By	Liquor fines		85 00
	Rent		1 00
	Interest on invested capital		51 40
By	Balance, 30th June, 1895		263 99
To	Balance, 30th June, 1894	396 23	
	Percentage on collections carried to credit of Indian Land Managem't Fund	5 16	
		401 39	401 39
To	Balance, 30th June, 1895, brought down	263 99	

Department of Indian Affairs

Lake of Two Mountain Indians, P.Q. (No. 48)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
	CAPITAL.	$ cts.	$ cts.
By	Balance, 30th June, 1894		2,315 85
	Timber sales		86 58
To	Percentage on collections carried to credit of Indian Land Management Fund.	8 66	
	Balance, 30th June, 1895	2,393 77	
		2,402 43	2,402 43
By	Balance, 30th June, 1895, brought down		2,393 77
	INTEREST.		
By	Balance, 30th June, 1894		130 72
	Charlemagne and Lac Ouareau Lumber Co., ground rent		79 66
	Interest on invested capital		94 28
To	Mary Simon, rent of house for school	22 50	
	Cecilia Franks " "	22 50	
	Rev. J. J. Oke, relief to destitute	25 00	
	Timothy Arirhon, travelling expenses to Ottawa	5 00	
	J. P. Nantel, inspecting school	10 00	
	Percentage on collections carried to credit of Indian Land Management Fund	4 78	
	Balance, 30th June, 1895	214 88	
		304 66	304 66
By	Balance, 30th June, 1895, brought down		214 88

Temiscamingue Indians, P.Q. (No. 49)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		2,345 96
To Balance, 30th June, 1895	2,345 96	
	2,345 96	2,345 96
By Balance, 30th June, 1895, brought down		2,345 96
INTEREST.		
By Balance, 30th June, 1894		945 26
G. L. Chitty, refund travelling expenses		6 69
A. McBride, proceeds of sale of oxen		42 80
Interest on invested capital		115 20
To E. Gauvreau, M.D., vaccine points	1 53	
A. Stewart, M.D., " "	1 25	
John Larmonth & Co., threshing machine	270 00	
" " freight on threshing machine	21 68	
Canadian Pacific Railway Co., " " "	20 35	
G. L. Chitty, travelling expenses	13 98	
Ottawa "Citizen," advertising timber	40 00	
"Central Canadian" "	6 40	
Hull "Despatch" "	8 00	
"La Presse" "	16 00	
Guelph "Herald" "	14 00	
Montreal "Gazette" "	67 34	
Empire Printing Co. "	192 00	
Pembroke "Standard" "	28 54	
Petrolia "Advertiser" "	8 00	
L'Orignal "Advertiser" "	6 40	
Shawville "Equity" "	8 00	
Toronto "World" "	24 00	
Mitchell "Advocate" "	6 40	
"Capital Siftings" "	10 40	
Peterboro' "Times" "	14 00	
"Presbyterian Review" "	18 00	
West Durham "News" "	6 40	
Cobourg "Sentinel-Star" "	6 40	
Presbyterian Printing Co. "	12 00	
"Dominion Oddfellow" "	12 00	
North Bay "Despatch" "	5 60	
Hamilton "Spectator" "	36 00	
London "Free Press" "	24 00	
"The Anglo-Saxon" "	8 00	
"Le Canada" "	8 00	
John Loughran, for cross-cut saw	16 13	
Hudson's Bay Co., stove and pipe for school	16 00	
A. McBride, freight on clothing for destitute	0 45	
J. M. Garland, clothing for destitute	22 01	
K. D. Graham, cod liver oil	11 15	
Dominion Express Co., freight	1 25	
A. McBride, grant for road-work	150 00	
School material	9 02	
Percentage on collections carried to credit of Indian Land Management Fund	2 57	
By Balance, 30th June, 1895		33 30
	1,143 25	1,143 25
To Balance, 30th June, 1895, brought down	33 30	

Department of Indian Affairs.

River Desert Indians, P.Q. (No. 50)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	35,950 27
To James Martin for road-work	359 50	
Balance 30th June, 1895	35,590 77	
	35,950 27	35,950 27
By Balance 30th June, 1895, brought down	.....	35,590 77
INTEREST.		
By Balance 30th June, 1894	.....	135 19
Rents collected	.....	401 93
Refund of interest moneys	.....	132 73
Outstanding cheque, 1892-93	.....	1 00
Interest on invested capital	.....	1,341 36
Refund of cost of snowshoes	.....	2 50
To Peter Tenesco, chief, salary, 1st April, 1894, to 31st March, 1895	125 00	
Louis Comondo, " " " " "	50 00	
Michael Comondo, " " " " "	50 00	
John McDougall, interpreter, salary, " " " "	40 00	
Wm. Jabot, pension, " " " " "	24 00	
E. A. Mulligan, M.D., salary, " " " "	200 00	
Jas. McAuley, teacher, " 1st April, 1894, to 30th Sept., 1894	150 00	
A. J. Doyle, " " 15th November, 1894, to 31st March, 1895	111 50	
J. Menass, travelling expenses enforcing sanitary regulations	9 00	
E. Gauvreau, M.D., vaccine	10 04	
W. G. Black, premium of insurance on school-house	5 40	
Jos. Lavasseur, constable, salary	25 00	
J. L. Vanasse, moiety of liquor fines	75 00	
Ottawa Citizen, advertising for school-teacher	5 00	
Catholic Record, " " "	7 50	
Oblat Community, lime	9 00	
P. Major, "	10 50	
Hull "Despatch," advertising for school teacher	5 00	
Lamab Watogan, pension	10 00	
C. Logue, sundries for school	0 80	
School material	6 65	
Canadian Pacific Railway Co., freight on maps	0 70	
John McDougall, wood for school	16 50	
James Martin, interest for distribution	690 00	
John M. Garland, blankets	67 20	
Mary Ann Michel, relief	6 00	
Abraham McDougall, arrears of interest	3 68	
P. Tenesco, expenses examining timber cut by trespassers	15 00	
Percentage on collections carried to credit of Indian Land Management Fund	24 26	
Balance, 30th June, 1895	261 98	
	2,014 71	2,014 71
By Balance, 30th June, 1895, brought down	.....	261 98

Songhees Indians, B. C. (No. 51)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		9,573 01
To Balance, 30th June, 1895	9,573 01	
	9,573 01	9,573 01
By Balance, 30th June, 1895, brought down		9,573 01
INTEREST.		
By Balance, 30th June, 1894		1,744 11
A. W. Vowell, rents collected		337 00
Interest on invested capital		396 08
To Henry Saunders, relief, seeds, etc., for destitute Indians	51 00	
" " supplies for destitute Indians	195 15	
E. G. Prior & Co., " " " "	4 25	
Henry Saunders, seed potatoes, etc	119 00	
Percentage on collections carried to credit of Indian Land Management Fund	20 22	
Balance, 30th June, 1895	2,087 57	
	2,477 19	2,477 19
By Balance, 30th June, 1895, brought down		2,087 57

Cowichan Indians, B.C. (No. 52).

CAPITAL.		
By Balance, 30th June, 1894		60 02
To Balance, 30th June, 1895	60 02	
	60 02	60 02
By Balance, 30th June, 1895, brought down		60 02
INTEREST.		
By Balance, 30th June, 1894		20 36
Interest on invested capital		2 84
Rent		1 00
To Percentage on collections carried to credit of Indian Land Managem't Fund	0 06	
Balance, 30th June, 1895	24 14	
	24 20	24 20
By Balance, 30th June, 1895, brought down		24 14

Department of Indian Affairs.

Musqueam Indians, B.C. (No. 53)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		113 11
To Balance, 30th June, 1895	113 11	
	113 11	113 11
By Balance, 30th June, 1895, brought down		113 11
INTEREST.		
By Balance, 30th June, 1894		17 53
Interest on invested capital		4 56
To Balance, 30th June, 1895	22 09	
	22 09	22 09
By Balance, 30th June, 1895, brought down		22 09

Squamish Indians, B.C. (No. 54)

CAPITAL.		
By Balance, 30th June, 1894		86 46
To Balance, 30th June, 1895	86 46	
	86 46	86 46
By Balance, 30th June, 1895, brought down		86 46
INTEREST.		
By Balance, 30th June, 1894		5 07
Interest on invested capital		3 24
To Balance, 30th June, 1895	8 31	
	8 31	8 31
By Balance, 30th June, 1895, brought down		8 31

Harrison River Band, B.C. (No. 55)

CAPITAL.		
By Balance, 30th June, 1894		14 96
To Balance, 30th June, 1895	14 96	
	14 96	14 96
By Balance, 30th June, 1895, brought down		14 96
INTEREST.		
By Balance, 30th June, 1894		12 88
Interest on invested capital		9 96
To Balance, 30th June, 1895	13 84	
	13 84	13 84
By Balance, 30th June, 1895, brought down		13 84

Quamichan Band, B.C. (No. 56)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	11 16
To Balance, 30th June, 1895	11 16	
	11 16	11 16
By Balance, 30th June, 1895, brought down	.....	11 16
INTEREST.		
By Balance, 30th June, 1894	.....	2 86
Interest on invested capital	.....	0 48
To Balance, 30th June, 1895	3 34	
	3 34	3 34
By Balance, 30th June, 1895, brought down	.....	3 34

Chemainus Band, B. C. (No. 57)

CAPITAL.		
By Balance, 30th June, 1894	.....	368 89
To Balance, 30th June, 1895	368 89	
	368 89	368 89
By Balance, 30th June, 1895, brought down	.....	368 89
INTEREST.		
By Interest on invested capital	.....	12 92
To Balance, 30th June, 1894	0 13	
Balance, 30th June, 1895	12 79	
	12 92	12 92
By Balance, 30th June, 1895, brought down	.....	12 79

Chillaheetsa Band, B. C. (No. 58)

CAPITAL.		
By Balance, 30th June, 1894	.....	2 14
To Balance, 30th June, 1895	2 14	
	2 14	2 14
By Balance, 30th June, 1895, brought down	.....	2 14
INTEREST.		
By Balance, 30th June, 1894	.....	0 67
Interest on invested capital	.....	0 12
To Balance, 30th June, 1895	0 79	
	0 79	79
By Balance, 30th June, 1895, brought down	.....	0 79

Department of Indian Affairs.

St. Peter's Band, Manitoba (No. 59)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Timber and stone dues		517 75
To Balance, 30th June, 1894	399 07	
Percentage on collections carried to credit of Indian Land Managem't Fund	51 77	
Balance, 30th June, 1895	66 91	
	517 75	517 75
By Balance, 30th June, 1895, brought down		66 91
INTEREST.		
By Moiety of liquor fines		120 00
Amounts transferred from Rat Portage and other Bands, credited in error		684 02
To Balance, 30th June, 1894	630 97	
Interest	36 04	
Percentage on collections carried to credit of Indian Land Managem't Fund	7 20	
Balance, 30th June, 1895	129 81	
	804 02	804 02
By Balance, 30th June, 1895, brought down		129 81

Broken Head River Band, Man. (No. 60)

CAPITAL.		
By Balance, 30th June, 1894		47 71
To Balance, 30th June, 1895	47 71	
	47 71	47 71
By Balance, 30th June, 1895, brought down		47 71
INTEREST.		
By Balance, 30th June, 1894		24 08
Liquor fine		25 00
Transfer of amount credited in error in 1883		39 43
Interest on invested capital		2 52
To Theo. Bertrand, services in liquor cases	15 00	
Percentage on collections carried to credit of Indian Land Managem't Fund	1 50	
Balance, 30th June, 1895	74 53	
	91 03	91 03
By Balance, 30th June, 1895, brought down		74 53

Portage la Prairie Band, Man. (No. 61)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		457 01
To Amount transferred to interest	457 01	
	457 01	457 01
INTEREST.		
By Balance, 30th June, 1894		173 39
Amount transferred from capital		457 01
Interest on invested capital		22 04
To sundry accounts for transfer of amount credited in error	652 44	
	652 44	652 44

Rosseau River Band, Man. (No. 62)

CAPITAL.		
By Balance, 30th June, 1894		1,938 12
Fines		34 00
To Percentage on collections carried to credit Indian Land Management Fund	3 40	
Balance, 30th June, 1895	1,968 72	
	1,972 12	1,972 12
By Balance, 30th June, 1895, brought down		1,968 72
INTEREST.		
By Balance, 30th June, 1894		14 57
Liquor fines		25 00
Proceeds of wheat sold		424 35
Interest on invested capital		68 32
To Expenses harvesting and threshing wheat	320 58	
Transfer of amounts credited in error in 1883	182 23	
Percentage on collections carried to credit of Indian Land Management Fund	26 96	
Balance, 30th June, 1895	2 47	
	532 24	532 24
By Balance, 30th June, 1895, brought down		2 47

Department of Indian Affairs.

Fort Alexander Band, Man. (No. 63)
In Account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		18 81
To Balance, 30th June, 1895	18 81	
	18 81	18 81
By Balance, 30th June, 1895, brought down		18 81
INTEREST.		
By Balance, 30th June, 1894		40 07
Transfer of amounts debited in error		11 90
Interest on invested capital		2 08
To Balance, 30th June, 1895	54 05	
	54 05	54 05
By Balance, 30th June, 1895, brought down		54 05

Tabusintac Band, N.B. (No. 64)

CAPITAL.		
By Balance, 30th June, 1894		2 25
To Balance, 30th June, 1895	2 25	
	2 25	2 25
By Balance, 30th June, 1895, brought down		2 25
INTEREST.		
By Balance, 30th June, 1894		25 67
Interest on invested capital		8 80
To Balance, 30th June, 1895	34 47	
	34 47	34 47
By Balance, 30th June. 1895, brought down		34 47

Indians of Nova Scotia (No. 66)*

By Balance, 30th June, 1894		84 66
Proceeds of sale of oxen		75 75
Liquor fines		30 00
Interest on invested capital		2 96
To Insurance on Cow Bay school-house	10 00	
Angus Whittie, services in connection with seizure of timber	26 00	
Ritchie, Parker & Chisholm, legal services in liquor prosecutions	86 80	
Chas. Pullet, care of oxen	23 75	
Percentage on collections carried to credit of Indian Land Management Fund	6 34	
Balance, 30th June, 1895	40 48	
	193 37	193 37
By Balance, 30th June, 1895, brought down		40 48

* No. 65 is closed.

Indians of New Brunswick (No. 67)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		6,457 88
Interest on invested capital		226 00
To P. Tennais, salary as constable, 1st April, 1894, to 31st March, 1895	24 00	
Balance, 30th June, 1895	6,659 88	
	6,683 88	6,683 88
By Balance, 30th June, 1895, brought down		6,659 88

Tobique Indians, N. B. (No. 68)

CAPITAL.		
By Balance, 30th June, 1894		9,805 90
Land sales		331 65
Timber		751 42
Tobique Valley Railway, right of way		125 00
To Percentage on collections carried to credit of Indian Land Management Fund	120 81	
Balance, 30th June, 1895	10,893 16	
	11,013 97	11,013 97
By Balance, 30th June, 1895, brought down		10,893 16
INTEREST.		
By Balance, 30th June, 1894		366 57
Ground rent		70 00
Interest on invested capital		356 04
To P. Solas, caretaker of church, salary from 1st April, 1894, to 31st December, 1894	30 00	
John Solas, caretaker of church, salary, from 1st January, 1895, to 31st March, 1895	10 00	
Rev. M. A. O'Keeffe, missionary, salary from 1st January, 1895, to 31st March, 1895	100 00	
F. Francis, wood for school	10 00	
D. McLeod, for cemetery fence	62 00	
Geo. W. Tinker, repairs to church	219 24	
F. Francis, wood for church	5 00	
J. A. Belyea, legal services *re* land taken by railway	6 50	
F. Francis, services looking after forest lands	6 00	
Percentage on collections carried to credit of Indian Land Management Fund	4 20	
Balance, 30th June, 1895	339 67	
	792 61	792 61
By Balance, 30th June, 1895, brought down		339 67

Indians of Prince Edward Island (No. 69)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		46 19
Interest on invested capital		1 64
To W. A. Morsan, Q.C., legal services, Ladywood and Micmacs	1 00	
Thos. Glover, repairs to school-house	16 53	
Balance, 30th June, 1895	30 30	
	47 83	47 83
By Balance, 30th June, 1895, brought down		30 30

J. B. Clench (No. 70)

CAPITAL.		
By Balance, 30th June, 1894		725 06
To Balance, 30th June, 1895	725 06	
	725 06	725 06
By Balance, 30th June, 1895, brought down		725 06
INTEREST.		
By Balance, 30th June, 1894		1,084 75
Interest on invested capital		63 32
To Balance, 30th June, 1895	1,148 07	
	1,148 07	1,148 07
By Balance, 30th June, 1895, brought down		1,148 07

James Menace (No. 72)*

By Balance, 30th June, 1894		46 21
Interest on invested capital		1 64
To Balance, 30th June, 1895	47 85	
	47 85	47 85
By Balance, 30th June, 1895, brought down		47 85

* No. 71 is closed.

William Wabbuck (No. 73)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		2,000 00
To Balance, 30th June, 1895	2,000 00	
	2,000 00	2,000 00
By Balance, 30th June, 1895, brought down		2,000 00
INTEREST.		
By Balance, 30th June, 1894		251 27
Interest on invested capital		78 80
To A. English, on account of maintenance of Mrs. William Wabbuck	100 00	
Balance, 30th June, 1895	230 07	
	330 07	330 07
By Balance, 30th June, 1895, brought down		230 07

Province of Quebec Indian Fund (No. 74).

CAPITAL.		
By Balance, 30th June, 1894		49,766 30
To Balance, 30th June, 1895	49,766 30	
	49,766 30	49,766 30
By Balance, 30th June, 1895, brought down		49,766 30
INTEREST.		
To Balance, 30th June, 1894	36,878 99	
H. Desilets, agent, salary, 1st April, 1894, to 31st March, 1895	100 00	
Rev. J. Gagné " " " "	50 00	
N. LeBel " " " "	150 00	
V. J. A. Venner " " " "	200 00	
L. E. Otis " 1st July, 1894, to 30th June, 1895	400 00	
P. E. Robillard " " 30th November, 1894	83 30	
N. C. Smellie, M.D., physician, salary, 1st April, 1894, to 31st March, 1895.	80 00	
A. A. Mondou, agent, salary, 9th November, 1894, to 30th June, 1895	129 03	
N. LeBel, commission on collections	17 25	
By Interest on invested capital		668 04
Proportion of legislative grant of $14,000, 1894-95		788 60
Balance, 30th June, 1895		36,631 93
	38,088 57	38,088 57
To Balance, 30th June, 1895, brought down	36,631 93	

Department of Indian Affairs.

Indian Land Management Fund (No. 75)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		156,680 61
To Balance, 30th June, 1895	156,680 61	
	156,680 61	156,680 61
By Balance, 30th June 1895, brought down		156,680 61
INTEREST.		
By Interest on capital at credit of this account		4,739 80
Proportion of legislative grant of $14,000.00		12,891 00
Percentage on collections charged sundry accounts		8,100 95
J. W. Jermyn, refund of amounts advanced for travelling expenses		1 00
Fees for valuing lots, &c		348 00
B. W. Ross, for boat sold		12 00
To Balance, 30th June, 1894	73,249 58	
E. D. Cameron, salary, 1st July, 1894, to 30th June, 1895	1,200 00	
A. G. Smith, " " " "	900 00	
Thos. Gordon, " " " 31st October, 1895	200 00	
John Beattie, " " " 30th June, 1895	500 00	
Thos. S. Walton, " " " "	900 00	
Wm. Van Abbott, " " " "	825 00	
A. M. Ironside, " " " "	720 00	
R. M. Stephen, M.D. " " "	43 52	
J. P. Donnelly, salary " " "	800 00	
W. G. Egar, " " " "	500 00	
J. Thackeray, " " " "	650 00	
A. McKelvey, " " " "	500 00	
A. English, " " " "	500 00	
J. W. Jermyn, " " " "	500 00	
James Allen, " " " 31st March, 1895	374 94	
James Martin, " " " 30th June, 1895	600 00	
A. Brosseau, " " " "	600 00	
P. E. Jones, M.D. " " " 30th April, 1895	502 00	
A. O. Bastien, " " " 30th June, 1895	200 00	
D. J. McPhee " " " "	750 00	
Wm. Bateman, " " " "	100 00	
B. W. Ross, " " " "	800 00	
B. W. Ross, increase in salary for June, 1894	7 21	
A. McBride, salary, 1st April, 1894, to 31st March, 1895	100 00	
Edmund Bennett, salary, " " "	60 00	
W. H. Price, salary, 18th June, 1894, to 30th June, 1895	621 66	
A. S. McDougall, salary, 1st November, 1894, to 30th June, 1895	400 00	
Chas. McGibbon, " 26th November, 1894, to "	298 56	
F. N. Allen, salary, as acting agent for April, 1895	42 18	
John Crowe. " 1st June to 30th June, 1895	47 03	
McG. C. Ironside, services in Manitowaning office	275 06	
J. P. Donnelly— $ cts.		
Allowance for office rent 130 00		
Contingencies 66 86		
196 86		
E. D. Cameron—		
Contingencies and expenses 83 85		
Commission on sales 20 29		
104 14		
C. J. Blomfield—		
Contingencies and travelling expenses	154 20	
Thos. Gordon—		
Travelling expenses 191 55		
Postage 11 53		
Commission on collections 11 07		
Furniture for office 28 00		
242 15		
Carried forward	88,464 09	26,092 75

Indian Land Management Fund (No. 75)—*Continued*

In account with the Department of Indian Affairs.

Service.		Debit.	Credit.
		$ cts.	$ cts.
Brought forward		88,464 09	26,092 75
INTEREST.—*Continued.*			
George Long—			
Contingencies and postage	$ 19 16		
Commission on disbursements	32 96		
" collections	25 50		
		77 62	
B. W. Ross—			
Travelling expenses and contingencies	550 29		
Commission on collections	395 48		
Allowance for office rent	97 58		
		1,043 35	
R. M. Stephen, M.D.—			
Allowance for office rent		150 00	
A. Brosseau—			
Travelling expenses and contingencies	67 10		
Allowance for office rent	60 00		
		127 10	
Thos. S. Walton—			
Commission on timber dues and fees	460 54		
Travelling expenses and contingencies	87 51		
Allowance for office rent	60 00		
		608 05	
James Martin—			
Allowance for office rent		50 00	
Wm. Van Abbott—			
Allowance for office rent	154 51		
Travelling expenses and contingencies	225 73		
		380 24	
Alex. McKelvey—			
Allowance for rent of office	60 00		
Travelling expenses	169 00		
		229 00	
Wm. Simpson—			
Commission on collections	386 35		
Travelling expenses and contingencies	153 06		
		539 41	
A. English—			
Travelling expenses	271 10		
Contingencies	68 15		
		339 25	
A. M. Ironside—			
Contingencies and postage	29 46		
Commission on collections while acting superintendent	276 75		
		306 21	
J. W. Jermyn—			
Travelling expenses and contingencies		55 75	
Samuel Hagan—			
Commission on collections	93 43		
Allowance for rent of office	24 00		
		117 43	
E. P. Watson—			
Commission on sales, &c.	184 13		
Travelling expenses	74 20		
		258 33	
L. E. Otis—			
Commission on collections	16 37		
Postage	1 98		
		18 35	
Wm. Bateman—			
Postage and travelling expenses		2 45	
John Thackeray—			
Travelling expenses		51 68	
Carried forward		92,818 31	26,092 75

Indian Land Management Fund (No. 75)—*Continued*

In account with the Department of Indian Affairs.

Service.			Debit.	Credit.
			$ cts.	$ cts.
Brought forward			92,818 31	26,092 75
INTEREST—*Concluded.*				
W. H. Price—				
Commission on collections	$ 81 41			
Allowance for office rent	45 00			
Contingencies	42 60			
			169 01	
E. Bennett—				
Travelling expenses			10 00	
Chas. McGibbon—				
Travelling expenses			3 00	
P. E. Jones—				
Travelling expenses			22 75	
James Allen—				
Postage			1 34	
A. S. McDougall—				
Travelling expenses			187 50	
A. A. Mondou—				
Travelling expenses			12 50	
Thos. Anderson—				
Expenses *re* sale of Passpasschase Reserve			56 40	
N. LeBel—				
Travelling expenses	$ 6 00			
Commission on collections	14 86			
			20 86	
George L. Chitty—				
Travelling expenses			100 00	
W. H. Baxter, services as forest bailiff			261 50	
Robert Russell " "			63 00	
Watson J. Mills " "			13 50	
Alfred Monck "			4 50	
George W. Lane " "			6 75	
Humphrey May " "			7 13	
John Landrigan, expenses seizing timber, Baxter Island			5 00	
John Ryan, surveying timber at Tobique Reserve			50 25	
Department Public Printing and Stationery, printing for year 1894-95			181 87	
" " " "			251 68	
Joseph Seymour, repairs to Agent Jones's office			38 75	
Blind River Lumber Company, refund of license fee			2 00	
John J. Simpson, fuel for office, Highgate			25 00	
Dominion Express Company, freight charges			2 40	
Canadian " "			5 00	
Canadian Pacific Ry. Co. "			0 60	
Rev. J. J. Oke, assisting Inspector Dingman at Lake of Two Mountains			5 25	
Timothy Arirhon " " "			5 25	
John Robinson, post office box rent 1894-95, Manitoulin Agency			3 00	
Aubrey White, tracing of East Dover township			5 00	
Alex. McDonald, advance for travelling expenses to Dokis Reserve			200 00	
T. J. McCauley, inspecting and reporting on trespass township of Haviland			47 70	
Louis Beauvais, use of house during collection of rents			3 00	
Arthur Matte " and board "			10 00	
Phileas Desmarais, freight, per steamer, on stationery			0 95	
J. Cooper, repairs to tent dispatch box, &c			18 50	
J. D. Morin, refund of mining fee			5 00	
W. A. MacLeod, for repair of office Manitowaning			500 00	
George McKim, to build outbuildings at clerk's house at Manitowaning			100 00	
By Balance, 30th June, 1895				69,131 50
			95,224 25	95,224 25
To Balance, 30th June, 1895, brought down			69,131 50	

Suspense Account (No. 76)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		6,179 63
To Repayment of cheque 1230, of 1891-92	754 00	
Balance, 30th June, 1895	5,425 63	
	6,179 63	6,179 63
By Balance, 30th June, 1895, brought down		5,425 63
INTEREST.		
By Balance, 30th June, 1894		958 82
Interest on balance at credit of account		249 84
A. E. Forget, deposit from Big Hunter		50 00
A. W. Vowell, collected from Chemainus and Siccameen Indians		25 00
E. D. Cameron, collected on account of debts of Six Nations		219 10
Amount transferred to credit of Battleford Indians		36 10
To P. Henry and H. McKay Wilson, on account of debt of Six Nations to Messrs. Whiting and Styres	140 27	
Robt. Shirra, on account of debt of Six Nations to Messrs. Whiting and Styres	25 07	
Josiah Woodley " " "	40 07	
John Lawson, " " John McDonald	35 07	
Bryce McMurrich & Co. " " A. Wilson	40 07	
Moses Bunn, cattle for Big Hunter	50 00	
Samson's Band, collections for hay permits transferred	20 36	
Sharphead's Band " " "	9 64	
Department of Marine and Fisheries, fishing license for Chemainus and Siccameen Indians	25 00	
Cote's Band, transfer of liquor fines credited this account, September, 1890	57 65	
Balance, 30th June, 1895	1,095 66	
	1,538 86	1,538 86
By Balance, 30th June, 1895, brought down		1,095 66

Department of Indian Affairs.

Indian School Fund (No. 77)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		141,222 83
To Balance, 30th June, 1895	141,222 83	
	141,222 83	141,222 83
By Balance, 30th June, 1895, brought down		141,222 83
INTEREST.		
By Interest on balance at credit		4,079 00
North British and Mercantile Insurance Co., refund of premium		12 45
Share of legislative grant		320 40
To Balance, 30th June, 1894	40,537 05	
Rev. J. M. Roy, salary as missionary, 1st April, 1894, to 31st March, 1895.	247 50	
Rev. G. A. Smith " " "	400 00	
Rev. John Tucker " " 30th June,, 1894.	35 00	
Rev. J. Jacobs " " 31st March, 1895.	400 00	
Rev. M. Mainville, salary as missionary, and allowance, 1st April, 1894, to 31st March, 1895	203 32	
Rev. G. Giroux, salary as missionary, 1st April, 1894, to 31st March, 1895.	225 96	
Rev. A. Sutherland, grant to Mount Elgin Institute	2,546 00	
North British and Mercantile Insurance Co., premium on insurance Mount Elgin Institute	15 00	
Royal Insurance Co., premium on insurance on barns, &c., Mount Elgin Institute	15 00	
Lancashire Insurance Co., premium on renewal, &c., Mount Elgin Institute	74 75	
G. G. German, premium on insurance on Mount Elgin Institute	138 00	
D. McCaig, inspecting school	8 50	
By Balance, 30th June, 1895		40,434 23
	44,846 08	44,846 08
To Balance, 30th June, 1895, brought down	40,434 23	

Superannuation Account (No. 79)*

To Balance, 30th June, 1894	16,554 68	
Jas C. Phipps, superannuation allowance, 1st April, 1894, to 31st Mar., 1895.	480 00	
Froome Talfourd " " "	400 00	
Charles Skene " " 28th Aug., 1894.	73 86	
J. T. Gilkison " " 31st March, 1895.	933 84	
Thomas Gordon " 1st Dec., 1894, to 28th Feb., 1895.	72 00	
Interest on debit balance	579 40	
By Abatements from agents' salaries		195 45
Balance, 30th June, 1895		18,898 83
	19,093 78	19,093 78
To Balance, 30th June, 1895, brought down	18,898 83	

* No. 78 is an appropriation account and will be found on page 15.

Point Grondin Indians, Ont. (No. 80)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		8,301 25
Timber dues		285 55
To Percentage on collections carried to credit of Indian Land Management Fund.	28 55	
Balance, 30th June, 1895	8,558 25	
	8,586 80	8,586 80
By Balance, 30th June, 1895, brought down		8,558 25
INTEREST.		
By Balance, 30th June, 1894		253 59
Interest on invested capital		299 40
Refund of amount advanced to purchase seed grain		100 00
B. W. Ross, refund of interest of absentees		4 08
Rents collected		48 00
To B. W. Ross, interest money for distribution	350 00	
R. M. Stephen, M.D., part salary for year to 30th June, 1895	23 52	
A. M. Ironside, paid chief Wm. Kinoshamy, for collecting vouchers	3 00	
Percentage on collections carried to credit of Indian Land Managem't Fund	2 88	
Balance, 30th June, 1895	325 67	
	705 07	705 07
By Balance, 30th June, 1895, brought down		325 67

Whitefish Bay Indians, Ont. (No. 81).

CAPITAL.		
By Balance, 30th June, 1894		2,389 49
To Balance, 30th June, 1895	2,389 49	
	2,389 49	2,389 49
By Balance, 30th June, 1895, brought down		2,389 49
INTEREST.		
By Balance, 30th June, 1894		1,173 51
Interest on invested capital		124 72
To amount credited this account in error in 1883, and now transferred to credit of sundry accounts	152 18	
Balance, 30th June, 1895	1,146 05	
	1,298 23	1,298 23
By Balance, 30th June, 1895, brought down		1,146 05

Whitefish Lake Indians, Ont. (No. 82)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		14,004 05
Timber dues		2,000 00
To percentage on collections carried to credit of Indian Land Managem't Fund	200 00	
Balance, 30th June, 1895	15,804 05	
	16,004 05	16,004 05
By Balance, 30th June, 1895, brought down		15,804 05
INTEREST.		
By Balance, 30th June, 1894		515 71
Interest on invested capital		508 20
Rents collected		205 00
To W. H. Howey, M.D., salary as physician, 1st April, 1894, to 31st March, '95	300 00	
B. W. Ross, interest for distribution	300 00	
Department Public Printing and Stationery, school material	5 87	
Frank Cochrane, stovepipes, &c., for school	1 45	
T. R. Ross, freight on desks, &c.	2 94	
A. McGill & Son, desks for school	42 00	
Widow Shainowquorun, relief grant	5 00	
Cahgahke and wife "	10 00	
Sahgutchewaishkong "	10 00	
Widow Faille "	5 00	
Widow Shabekezhikgoke "	5 00	
Alex. Wears, wood for school	40 00	
Hudson Bay Co., lime, &c., for sanitary purposes	6 25	
Percentage on collections carried to credit of Indian Land Managem't Fund	12 30	
Balance, 30th June, 1895	483 10	
	1,228 91	1,228 91
By Balance, 30th June, 1895, brought down		483 10

Hope Band, B. C. (No. 84)*

CAPITAL.		
By Balance, 30th June, 1894		3,621 51
To Balance, 30th June, 1895	3,621 51	
	3,621 51	3,621 51
By Balance, 30th June, 1895, brought down		3,621 51
INTEREST.		
By Balance, 30th June, 1894		460 19
Interest		142 88
To C. Inkman, for hay supplied	20 67	
Balance, 30th June, 1895	582 40	
	603 07	603 07
By Balance, 30th June, 1895, brought down		582 40

* No. 83 closed.

Pagonakeshick's Band, Ont. (No. 85)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		766 78
To Balance, 30th June, 1895	766 78	
	766 78	766 78
By Balance, 30th June, 1895, brought down		766 78
INTEREST.		
By Balance, 30th June, 1894		337 77
Interest		38 68
To Ontario & Western Lumber Co. for lumber supplied Bands 38, A and B	12 00	
Rat Portage Hardware Co., hardware " " " "	3 70	
Balance, 30th June, 1895	360 75	
	376 45	376 45
By Balance, 30th June, 1895, brought down		360 75

Eagle Lake Indians, Man. (No. 90)*

CAPITAL.		
By Balance, 30th June, 1894		2,597 05
To Balance, 30th June, 1895	2,597 05	
	2,597 05	2,597 05
By Balance, 30th June, 1895, brought down		2,597 05
INTEREST.		
By Balance, 30th June, 1894		333 27
Interest on invested capital		102 56
To Amount credited to this account in error in 1883, and now transferred to credit of sundry accounts	265 00	
Balance, 30th June, 1895	170 83	
	435 83	435 83
By Balance, 30th June, 1895, brought down		170 83

Ebb and Flow Lake Indians, Man. (No. 91)

CAPITAL.		
By Balance, 30th June, 1894		148 50
To Balance, 30th June, 1895	148 50	
	148 50	148 50
By Balance, 30th June, 1895, brought down		148 50
INTEREST.		
By Balance, 30th June, 1894		30 46
Interest on invested capital		6 24
To Balance, 30th June, 1895	36 70	
	36 70	36 70
By Balance, 30th June, 1895, brought down		36 70

* Nos. 86 to 89 are appropriation accounts and will be found on page 15.

Restigouche Indians, P.Q. (No. 92)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894	.....	68 00
To Balance, 30th June, 1895	68 00	
	68 00	68 00
By Balance, 30th June, 1895, brought down	.....	68 00
INTEREST.		
By Balance, 30th June, 1894	.....	1 72
Interest on invested capital	.....	2 44
To Balance, 30th June, 1895	4 16	
	4 16	4 16
By Balance, 30th June, 1895, brought down	.....	4 16

St. Mary's Indians, N. B. (No. 93)

CAPITAL.		
By Balance, 30th June, 1894	.....	45 94
To Balance, 30th June, 1895	45 94	
	45 94	45 94
By Balance, 30th June, 1895, brought down	.....	45 94
INTEREST.		
By Balance, 30th June, 1894	.....	7 30
Interest on invested capital	.....	1 84
Liquor fines	.....	50 00
To J. A. Belyea, legal services (Queen *vs.* Marsh)	3 09	
Percentage on collections carried to credit of Indian Land Managem't Fund	3 00	
Balance, 30th June, 1895	53 05	
	59 14	59 14
By Balance, 30th June, 1895, brought down	.....	53 05

Okanagan Indians, B. C. (No. 94)

CAPITAL.		
By Balance, 30th June, 1894	.....	191 52
To Balance, 30th June, 1895	191 52	
	191 52	191 52
By Balance, 30th June, 1895, brought down	.....	191 52
INTEREST.		
By Balance, 30th June, 1894	.....	6 70
Interest on invested capital	.....	6 92
To Balance, 30th June, 1895	13 62	
	13 62	13 62
By Balance, 30th June, 1895, brought down	.....	13 62

Wabigon Indians, Man. (No. 95)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1895		31 21
To Balance, 30th June, 1895	31 21	
	31 21	31 21
By Balance, 30th June, 1895, brought down		31 21
INTEREST.		
By Balance, 30th June, 1894		39 92
Interest		2 52
Amount transferred, previously credited sundry accounts in error		10 45
To Balance, 30th June, 1895	52 89	
	52 89	52 89
By Balance, 30th June, 1895, brought down		52 89

Chehalis Band, B. C. (No. 97)*

By Balance, 30th June, 1894		4,447 31
Interest on invested capital		155 68
To A. C. Wells & Co., for hay	55 15	
T. J. Trapp & Co., farm implements	28 80	
E. J. Newton, set harness	35 00	
E. Menten, provisions	100 00	
Balance, 30th June, 1895	4,384 04	
	4,602 99	4,602 99
By Balance, 30th June, 1895, brought down		4,384 04

Indians of Cumberland County, N. S. (No. 98)

CAPITAL.		
By Balance, 30th June, 1894		155 16
To Balance, 30th June, 1895	155 16	
	155 16	155 16
By Balance, 30th June, 1895, brought down		155 16
INTEREST.		
By Balance, 30th June, 1894		24 59
Interest on invested capital		6 28
To Balance, 30th June, 1895	30 87	
	30 87	30 87
By Balance, 30th June, 1895, brought down		30 87

* No. 96 closed.

Department of Indian Affairs.

Heirs of Chief Piknawatick (No. 99)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
CAPITAL.		
By Balance, 30th June, 1894	.....	1,260 00
To Balance, 30th June, 1895	1,260 00	
	1,260 00	1,260 00
By Balance, 30th June, 1895, brought down	.....	1,260 00
INTEREST.		
By Balance, 30th June, 1894	.....	86 91
Interest on invested capital	.....	47 12
Rents	.....	381 20
To Peter Tenesco, paid him on account of heirs	300 00	
Percentage on collections carried to credit of Indian Land Managem't Fund	22 87	
Balance, 30th June, 1895	192 36	
	515 23	515 23
By Balance, 30th June, 1895, brought down	.....	192 36

One Arrow's Band, N. W. T. (No. 100).

By Balance, 30th June, 1894	.....	25 33
Interest on invested capital	.....	0 88
North-west government for public roadway through reserve	.....	30 30
To Percentage on collections carried to credit of Indian Land Managem't Fund	3 03	
Balance, 30th June, 1895	53 48	
	56 51	56 51
By Balance, 30th June, 1895, brought down	.....	53 48

Indians of Port Medway, N. S. (No. 101)

By Balance, 30th June, 1894	.....	160 61
Interest on invested capital	.....	5 64
To Balance, 30th June, 1895	166 25	
	166 25	166 25
By Balance, 30th June, 1895, brought down	.....	166 25

Indians of Reserve 38a, Treaty No. 3 (No. 102)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
CAPITAL.		
By Balance, 30th June, 1894		1,863 97
To Balance, 30th June, 1895	1,863 97	
	1,863 97	1,863 97
By Balance, 30th June, 1895, brought down		1,863 97
INTEREST.		
By Balance, 30th June, 1894		343 75
Interest on invested capital		77 36
To Ontario and Western Lumber Co., lumber supplied to Rat Portage Band	101 76	
Rat Portage Hardware Co., hardware supplied to Rat Portage Band	8 35	
Amount credited in error in 1883 and now transferred to credit of sundry accounts	270 43	
Balance, 30th June, 1895	40 57	
	421 11	421 11
By Balance, 30th June, 1895, brought down		40 57

Indians of Eel Ground, N. B. (No. 103).

By Balance, 30th June, 1894		153 48
Interest on invested capital		5 36
To Cole's National Manufacturing Co., 1 flag	9 00	
Chief Peter Julian, part expenses, return to Eel Ground	6 00	
Mrs. Jane Piller " " "	2 50	
Canadian Pacific Ry., 1 fare, Ottawa to Montreal	2 50	
Balance, 30th June, 1895	138 84	
	158 84	158 84
By Balance, 30th June, 1895, brought down		138 84

Heirs of J. Williams and Ann Ketsetsaronkwa (No. 104)

By Balance, 30th June, 1894		382 98
Interest on invested capital		13 40
To Ann Ketsetsaronkwa, amount of interest due on deposit for heirs of Jos. Williams	65 18	
Balance, 30th June, 1895	331 20	
	396 38	396 38
By Balance, 30th June, 1895, brought down		331 20

Indians of Big Island Reserve 31c, Treaty 3 (No. 105)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		2,312 27
To Balance, 30th June, 1895	2,312 27	
	2,312 27	2,312 27
By Balance, 30th June, 1895, brought down		2,312 27
INTEREST.		
By Balance, 30th June, 1894		8 76
Interest on invested capital		81 24
Rat Portage Band, amount credited in error		30 20
To Balance, 30th June, 1895	120 20	
	120 20	120 20
By Balance, 30th June, 1895, brought down		120 20

Swan Lake Indians, Man. (No. 106)

By Balance 30th June, 1894		406 34
Interest on invested capital		14 20
E. McColl, for wheat sold		135 85
" hay "		20 00
Portage la Prairie Band, transfer for amount credited in error to that band		34 12
To John Cameron, services in connection with sale of wheat and barley	14 00	
" twine supplied for binding grain	76 80	
George Tucker, storing wheat, etc	32 00	
John Cameron, putting in seed wheat	25 00	
F. Ogletree, use of plough	2 50	
Amount credited this account in error in 1883 and now transferred to credit of sundry accounts	45 00	
Percentage on collections carried to credit of Indian Land Management Fund	9 35	
Balance 30th June, 1895	405 86	
	610 51	610 51
By Balance 30th June, 1895, brought down		405 86

Spellamcheen Indians, B. C. (No. 107)

By Balance, 30th June, 1894		699 16
Interest on invested capital		24 48
To Balance, 30th June, 1895	723 64	
	723 64	723 64
By Balance, 30th June, 1895, brought down		723 64

Riding Mountain Indians, N. W. T. (No. 108)

Balance, 30th June, 1894		30 96
Interest on invested capital		1 08
To Amount transferred to credit of Keesickowenin's Band	32 04	
	32 04	32 04
By Balance, 30th June, 1895, brought down		32 04

Rat Portage Indians Ont. (No. 109)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
		$ cts.	$ cts.
By	Balance, 30th June, 1894		132 34
	Interest on invested capital		4 64
	E. McColl, moiety of liquor fine, P. Lovitt		40 00
To	Amount credited in error and now transferred to sundry accounts	174 58	
	Percentage on collections carried to credit of Indian Land Management Fund	2 40	
		176 98	176 98

Skwah Indians, B.C. (No. 110)

By	Balance, 30th June, 1894		191 57
	Rents		12 00
	Interest on invested capital		6 72
To	A. C. Wells & Co., hay supplied	54 00	
	Percentage on collections carried to credit of Indian Land Management Fund	72	
	Balance 30th June, 1895	155 57	
		210 29	210 29
By	Balance 30th June, 1895, brought down		155 57

Indians of Sumas Lake, B.C. (No. 112)*

By	Balance, 30th June, 1894		48 85
	Interest on invested capital		1 72
	Rents		50 00
To	A. C. Wells & Co., hay supplied	14 50	
	Percentage on collections carried to credit of Indian Land Managem't Fund	3 00	
	Balance 30th June, 1895	83 07	
		100 57	100 57
By	Balance, 30th June, 1895, brought down		83 07

Lake Manitoba Band, (No. 113).

By	Balance, 30th June, 1894		28 97
	Interest on invested capital		1 00
To	Balance, 30th June, 1895	29 97	
		29 97	29 97
By	Balance, 30th June, 1895, brought down		29 97

The Brothers' Reserve, N.B. (No. 114).

By	Balance, 30th June, 1894		18 63
	Interest on invested capital		68
To	Balance, 30th June, 1895	19 31	
		19 31	19 31
By	Balance, 30th June, 1895, brought down		19 31

* No. 111 is an appropriation account and will be found on page 15.

Indians of Red Bank, N. B. (No. 115)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
CAPITAL.	$ cts.	$ cts.
By Balance, 30th June, 1894		895 24
Interest on invested capital		31 32
W. D. Carter, timber dues		18 00
To Percentage on collections carried to credit of Indian Land Management Fund	1 80	
Balance, 30th June, 1895	942 76	
	944 56	944 56
By Balance 30th June, 1895, brought down		942 76

Indians of Burnt Church, N. B. (No. 116)

By Balance, 30th June, 1894		311 30
Interest on invested capital		10 88
W. D. Carter, moiety of liquor fine		37 00
To Cole's National Manufacturing Co., one flag	9 00	
F. W. J. Anderson, material and repairs for Church Point school	85 32	
J. W. & J. Anderson, sundries for Church Point school	1 85	
Percentage on collections carried to credit of Indian Land Management Fund	2 22	
Balance, 30th June, 1895	260 79	
	359 18	359 18
By Balance, 30th June, 1895, brought down		260 79

Indians of Wallabuck Lake, N.S. (No. 117)

By Balance 30th June, 1894		200 69
Interest on invested capital		7 04
To Balance 30th June, 1895	207 73	
	207 73	207 73
By Balance 30th June, 1895, brought down		207 73

Passpasschase's Reserve, N. W. T. (No. 120)*

By Balance, 30th June, 1894		8,228 88
Land Sales		5,546 39
To Percentage on collections carried to credit of Indian Land Management Fund	554 64	
Balance, 30th June, 1895	13,220 63	
	13,775 27	13,775 27
By Balance, 30th June, 1895, brought down		13,220 63
INTEREST.		
By Balance, 30th June, 1894		175 06
Interest on invested capital		294 12
Amount transferred from account of Enoch's Reserve		10 33
To Montreal "Gazette," advertising sale of land at Edmonton	25 00	
Toronto "Empire," " " " "	97 50	
North-western Pub. Co. " " " "	27 50	
Toronto "World" " " " "	15 00	
Balance, 30th June, 1895	314 51	
	479 51	479 51
By Balance, 30th June, 1895, brought down		314 51

* Nos. 118 and 119 are appropriation accounts and will be found on page 15.

White Bear's Reserve, Moose Mountain Agency, N. W. T. (No. 121

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		1 27
Interest on invested capital		0 04
A. E. Forget, fine for cutting wood		4 00
To percentage on collections carried to credit of Indian Land Management Fund	0 40	
Balance, 30th June, 1895	4 91	
	5 31	5 31
By Balance, 30th June, 1895, brought down		4 91

Indians of Whycocomagh, N. S. (No. 122)

By Balance, 30th June, 1894		21 69
Interest on invested capital		0 76
To estate J. S. Hart, material for repairing school-house	16 23	
Balance, 30th June, 1895	6 22	
	22 45	22 45
By Balance, 30th June, 1895, brought down		6 22

Gibson Indians, Ont. (No. 123)

CAPITAL.		
By Balance, 30th June, 1894		189 00
Georgian Bay Lumber Co., compensation for land flooded		75 00
To Percentage on collections carried to credit of Indian Land Management Fund	7 50	
Balance, 30th June, 1895	256 50	
	264 00	264 00
By Balance, 30th June, 1895, brought down		256 50
INTEREST.		
By Balance, 30th June, 1894		387 38
Interest on invested capital		20 16
Georgian Bay Lumber Co., compensation for lands flooded		110 50
To Sundry Indians " " "	164 00	
Isaac Day, inspecting school	14 40	
Cole's National Manufacturing Co., 1 flag	10 00	
Percentage on collections carried to credit of Indian Land Management Fund	6 63	
Balance, 30th June, 1895	323 01	
	518 04	518 04
By Balance, 30th June, 1895, brought down		323 01

Indians of Texas Lake, B.C. (No. 124)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		1,231 13
Interest on invested capital		43 08
To Balance, 30th June, 1895	1,274 21	
	1,274 21	1,274 21
By Balance, 30th June, 1895, brought down		1,274 21

Indians of Yale, B.C. (No. 125)

By Balance, 30th June, 1894		818 57
Interest on invested capital		28 64
To C. Inkman, hay supplied	7 18	
Balance, 30th June, 1895	840 03	
	847 21	847 21
By Balance, 30th June, 1895, brought down		840 03

Indians of Nicoamen, B.C. (No. 126)

By Balance, 30th June, 1894		344 07
Interest on invested capital		12 04
To Balance, 30th June, 1895	356 11	
	356 11	356 11
By Balance, 30th June, 1895, brought down		356 11

Long Plain Indians, Man. (No. 127)

By Balance, 30th June, 1894		519 78
Interest on invested capital		18 20
Amount credited Portage la Prairie Band, and now transferred		97 44
" sundry accounts in error in 1883, and now transferred		261 74
To Henry Ogletree, seed supplied, spring, 1894	32 15	
Massey-Harris Manufacturing Co., materials for repairs to mower	12 00	
Watson & Whinister, repairing mower	5 50	
Balance, 30th June, 1894	847 51	
	897 16	897 16
By Balance, 30th June, 1895, brought down		847 51

Matsqui-sah-sah-com Band, B.C. (No. 129) *

By Balance, 30th June, 1894		115 70
Interest on invested capital		4 04
To Balance, 30th June, 1895	119 74	
	119 74	119 74
By Balance, 30th June, 1895, brought down		119 74

* No. 128 is an appropriation account and will be found on page 15.

Coutcheeching Band, Man. (No. 130)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance 30th June, 1894		130 90
Interest on invested capital		4 56
To Balance 30th June, 1895	135 46	
	135 46	135 46
By Balance 30th June, 1895, brought down		135 46

Hungry Hall No. 1, Man. (No. 131)

By Balance 30th June, 1894		53 56
Interest on invested capital		1 88
To Balance 30th June, 1895	55 44	
	55 54	55 44
By Balance 30th June, 1895, brought down		55 44

Way-way-see-cappo's Band, N.W.T. (No. 132)

By Balance 30th June, 1894		3 78
Fines for cutting timber		40 00
Interest on invested capital		0 16
Liquor fine		86 20
To Mrs. Nobbis, moiety of liquor fine	25 00	
Percentage on collections carried to credit of Indian Land Management Fund	9 17	
Balance 30th June, 1895	95 97	
	130 14	130 14
By Balance 30th June, 1895, brought down		95 97

Tsoo-a-die Band, B.C. (No. 133)

To Balance 30th June, 1894	9 70	
Interest on invested capital	0 36	
Percentage on collections carried to credit of Indian Land Management Fund	35 18	
Balance 30th June, 1895	541 01	
By Rents		586 25
	586 25	586 25
To Balance 30th June, 1895, brought down	541 01	

Indians of Langley, B.C. (134)*

By Balance 30th June, 1894		220 01
Interest on invested capital		7 68
To Hudson Bay Co., hay supplied	50 00	
Balance 30th June, 1895	177 69	
	227 69	227 69
By Balance 30th June, 1985, brought down		177 69

* No. 135 is closed. No. 136 is an appropriation account and will be found on page 15.

Betsiamits Indians, P.Q. (No. 137)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance 30th June, 1894		1,186 30
Interest on invested capital		41 52
To J. A. Belyea, legal services Queen *vs.* Burns	3 50	
Balance 30th June, 1895	1,224 32	
	1,227 82	1,227 82
By Balance 30th June, 1895, brought down		1,224 32

Blackfoot Indians (No. 138)

By Balance 30th June, 1894		868 88
Interest on invested capital		30 40
Refund on account of advance for irrigation		62 97
Royalty on coal		55 90
To E. Grisback, material furnished for irrigation ditch	15 54	
A. E. Forget, expenditure on irrigation works	700 00	
Calgary Hardware Company, block for ferry cable	6 40	
E. Grisback, lumber for boat	5 58	
H. W. Bragg, sundry expenses for ferry	4 50	
" material for ferry at North Reserve	6 50	
Mrs. P. Beaupré, rosin " "	2 00	
Percentage on collections carried to credit of Indian Land Management Fund	3 35	
Balance on 30th June, 1895	274 28	
	1,018 15	1,018 15
By Balance 30th June, 1895, brought down		274 28

Little Bone's Band (No. 140)*

By Balance, 30th June, 1894		140 29
Interest on invested capital		4 92
Hay and wood permits		40 00
To Jos. Clementson, relief to Puquetet	3 00	
Shesheep, dues on hay cut by Yellow Calf's party	70 00	
Percentage on collections to credit of Indian Land Management Fund	2 40	
Balance, 30th June, 1895	109 81	
	185 21	185 21
By Balance, 30th June, 1895, brought down		109 81

Halalt Band, B.C. (No. 141)

By Balance, 30th June, 1894		133 04
Interest on invested capital		4 64
To Balance, 30th June, 1895	137 68	
	137 68	137 68
By Balance, 30th June, 1895, brought down		137 68

* No. 139 is an appropriation account and will be found on page 15.

Côté's Band (No. 142)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		103 75
Interest on invested capital		3 64
Liquor fines, transferred from Suspense Account		57 65
Thos. Singuish, for beef sold to department		16 62
To Amount transferred to P.O. Savings Bank, to credit of sundry Indians	118 44	
Balance, 30th June, 1895	63 22	
	181 66	181 66
By Balance, 30th June, 1895, brought down		63 22

The-man-who-took-the-coat Band (No. 143)

By Balance, 30th June, 1894		6 53
Interest on invested capital		0 24
Hay permits		53 50
To Cowan & Edwards, for mower	50 00	
Percentage on collections to credit of Indian Land Management Fund	3 21	
Balance, 30th June, 1895	7 06	
	60 27	60 27
By Balance, 30th June, 1895, brought down		7 06

Boothroyd Band, B.C. (No. 147)

By Balance, 30th June, 1894		103 64
Interest on invested capital		3 64
To Balance, 30th June, 1895	107 28	
	107 28	107 28
By Balance, 30th June, 1895, brought down		107 28

Siska Band, B.C. (No. 148)

By Balance, 30th June, 1894		86 38
Interest on invested capital		3 04
To Balance, 30th June, 1895	89 42	
	89 42	89 42
By Balance, 30th June, 1895, brought down		89 42

Kanaka Band, B.C. (No. 149)

By Balance, 30th June, 1894		106 05
Interest on invested capital		3 72
To Balance, 30th June, 1895	109 77	
	109 77	109 77
By Balance, 30th June, 1895, brought down		109 77

* Nos. 144 and 145 are appropriation accounts and will be found on page 15. No. 146 is closed.

Skuppa Band, B.C. (No. 150)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		74 24
Interest on invested capital		2 60
To Balance, 30th June, 1895	76 84	
	76 84	76 84
By Balance, 30th June, 1895, brought down		76 84

Lytton Band, B.C. (No. 151)

By Balance, 30th June, 1894		0 79
Interest on invested capital		0 04
To Balance, 30th June, 1895	0 83	
	0 83	0 83
By Balance, 30th June, 1895, brought down		0 83

Cook's Ferry, B.C., (No 152)

By Balance, 30th June, 1894		318 39
Interest on invested capital		11 12
To Balance, 30th June, 1895	329 51	
	329 51	329 51
By Balance, 30th June, 1895, brought down		329 51

Salmon Arm Reserve, B.C., (No. 153)

By Balance, 30th June, 1894		7 48
Interest on invested capital		0 28
To Balance, 30th June, 1895	7 76	
	7 76	7 76
By Balance, 30th June, 1895, brought down		7 76

Ochapowace's Band (No. 154)

By Wood permits		6 00
To Hudson Bay Co., flour and tea for destitute	5 64	
Percentage on collections to credit of Indian Land Management Fund	0 36	
	6 00	6 00

Samson's Band, (No. 155)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		108 50
Interest on invested capital		3 80
Hay permits		5 11
Amount transferred from Suspense Account for hay permits in 1891		20 36
Amounts received on deposit from sundry Indians		183 22
To Refunds out of deposits to purchase cattle for Indians	179 62	
Amount transferred to P. O. Savings Bank	115 90	
John West, for shingle-mill	22 97	
Percentage on collection to credit of Indian Land Management Fund	0 30	
Balance, 30th June, 1895	2 20	
	320 99	320 99
By Balance, 30th June, 1895, brought down		2 20

Red Pheasant's Band, (No. 156)

By Balance, 30th June, 1894		59 34
Interest on invested capital		2 08
To Kenopatch, refund of deposit	32 56	
Balance, 30th June, 1895	28 86	
	61 42	61 42
By Balance, 30th June, 1895, brought down		28 86

Ohamil Band, B.C., (No. 157)

By Balance, 30th June, 1894		205 31
Interest on invested capital		7 20
To Balance, 30th June, 1895	212 51	
	212 51	212 51
By Balance, 30th June, 1895, brought down		212 51

Skawahlook Band, B.C., (No. 158)

By Balance, 30th June, 1894		186 00
Interest on invested capital		6 52
To Balance, 30th June, 1895	192 52	
	192 52	192 52
By Balance, 30th June, 1895, brought down		192 52

Union Bar Band, B.C. (No. 159)

By Balance, 30th June, 1894		432 98
Interest on invested capital		15 16
To Balance, 30th June, 1895	448 14	
	448 14	448 14
By Balance, 30th June, 1895, brought down		448 14

Spuzzum Band, B.C. (No. 160)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		175 81
Interest on invested capital		6 08
To Balance, 30th June, 1895	181 89	
	181 89	181 89
By Balance, 30th June, 1895, brought down		181 89

Boston Bar Band, B.C. (No. 161)

By Balance, 30th June, 1894		262 63
Interest on invested capital		9 20
To Balance, 30th June, 1895	271 83	
	271 83	271 83
By Balance, 30th June, 1895, brought down		271 83

Popkum Band, B.C. (No. 162)

By Balance, 30th June, 1894		89 90
Interest on invested capital		3 12
To Balance, 30th June, 1895	93 02	
	93 02	93 02
By Balance, 30th June, 1895, brought down		93 02

Skwawtits' Band, B.C. (No. 163)

By Balance, 30th June, 1894		28 15
Interest on invested capital		1 00
To Balance, 30th June, 1895	29 15	
	29 15	29 15
By Balance, 30th June, 1895, brought down		29 15

Little South-west Reserve, N.B. (No. 164)

By Balance, 30th June, 1894		158 31
Interest on invested capital		5 52
To Balance, 30th June, 1895	163 83	
	163 83	163 83
By Balance, 30th June, 1895, brought down		163 83

Big Hole Reserve, N.B. (No. 165)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		210 86
Interest on invested capital		7 36
W. D. Carter, rent of fishing privileges		150 00
To Peter Julian and Lemey Rowan, travelling expenses	20 00	
Jane Pettie, Board of P. Julian and L. Rowan	6 00	
Department of Justice, hand-cuffs and dark lantern for constable	6 25	
Percentage on collections carried to credit of Indian Land Management Fund	9 00	
Balance, 30th June, 1895	326 97	
	368 22	368 22
By Balance, 30th June, 1895, brought down		326 97

Ermineskin's Reserve (No. 167) *

By Balance, 30th June, 1894		153 80
Interest on invested capital		5 40
Ermineskin, for beef sold to department		55 65
Sundry Indians " "		175 06
Collections from sundry Indians, on account of cost of reaper		100 00
Headman, beef sold department		13 00
Collections on account of hay permits		10 00
To Mahaffey & Clinkskill, for cattle for sundry Indians	76 00	
Headman, refund of part of amount credited for beef	6 00	
Moses " " "	7 00	
John Potts " " "	20 00	
Machino " " "	10 00	
Buffalo Chips " " "	7 00	
Ermineskin " " "	49 65	
Roasting " " "	15 00	
Transferred to P. O. Savings Bank for credit of sundry Indians for beef sold to department	192 76	
John West, shingle-mill	123 85	
Percentage on collections carried to credit of Indian Land Management Fund	0 60	
Balance, 30th June, 1895	5 05	
	512 91	512 91
By Balance, 30th June, 1895, brought down		5 05

* Bridge River Band, B.C. (No. 168)

By Balance, 30th June, 1894		306 06
Interest on invested capital		10 72
To Balance, 30th June, 1895	316 78	
	316 78	316 78
By Balance, 30th June, 1895, brought down		316 78

Enoch's Reserve (No. 169)

By Balance, 30th June, 1894		48 65
Interest on invested capital		1 68
To N. D. Besk, legal services *re* liquor cases	40 00	
Amount transferred to account of Pass-pass-chase's Reserve	10 33	
	50 33	50 33

* No. 166 is closed.

Oak River Sioux (No. 170)

In account with the Department of Indian Affairs.

	Service.	Debit.	Credit.
		$ cts.	$ cts.
By	Balance, 30th June, 1894		91 77
	Interest on invested capital		3 20
	A. E. Forget, fine		2 10
To	M. G. McEwan, material for corral in which to mark cattle	16 30	
	W. Gowanlock, for lumber	4 70	
	Percentage on collections carried to credit of Indian Land Management Fund	12	
	Balance, 30th June, 1895	75 95	
		97 07	97 07
By	Balance, 30th June, 1895, brought down		75 95

Stony Indians (No. 171)

	CAPITAL.		
By	Balance, 30th June, 1894		535 24
	Canadian Pacific Railway, land taken for gravel		200 00
To	Percentage on collections carried to credit of Indian Land Management Fund	20 00	
	Balance, 30th June, 1895	715 24	
		735 24	735 24
By	Balance, 30th June, 1895, brought down		715 24
	INTEREST.		
By	Balance, 30th June, 1894		609 89
	Interest on invested capital		40 08
	Rents collected		125 00
	Sundry Indians for beef sold department		1,262 59
	Amount transferred from account of Chiniquay's Band		44 98
	Refund on account of cost of herding cattle		144 90
To	Otumbehigea and Mosquito, deposit to purchase cattle	7 18	
	Andrew Sibbald, cattle delivered to Stony Indians	95 00	
	Thos. Ellis " "	405 00	
	Canadian Pacific Railway, freight on wool	1 18	
	J. Diamond, stove for Bear's Paw	26 95	
	James Two Young Men, beef sold to department	13 14	
	Amos Big Stony " "	10 00	
	John Rocky Mountain " "	10 00	
	Frank Ricks, cattle for Chiniquay	30 00	
	Harris Co., waggon for Jonas Two Young Men	72 50	
	Cost of herding cattle	144 90	
	H. A. Perley, board for Jonas Two Young Men, while purchasing waggon	2 00	
	Transferred to Savings Bank to credit of sundry Indians for beef sold to department	1,117 10	
	Wm. Graham, grant for repairs to Bow River bridge	250 00	
	Percentage on collections carried to credit of Indian Land Management Fund	7 50	
	Balance, 30th June, 1895	34 99	
		2,227 44	2,227 44
By	Balance, 30th June, 1895, brought down		34 99

Ohiat Band, B.C. (No. 172)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		56 57
Interest on invested capital		1 96
Rent		55 00
To Percentage on collections carried to credit of Indian Land Management Fund	3 30	
Balance, 30th June, 1895	110 23	
	113 53	113 53
By Balance, 30th June, 1895, brought down		110 23

Blood Indians (No. 173)

By Balance, 30th June, 1894		207 05
Interest on invested capital		7 24
Collected from sundry Indians, on account of cost of saw-mill		149 00
Liquor fines		57 50
To Waterous Engine Works Co., part payment on saw-mill	363 29	
Percentage on collections carried to credit of Indian Land Management Fund	3 45	
Balance, 30th June, 1895	54 05	
	420 79	420 79
By Balance, 30th June, 1895, brought down		54 05

Islington Reserve (No. 174)

By Balance, 30th June, 1894		24 33
Interest on invested capital		0 84
To Balance, 30th June, 1895	25 17	
	25 17	25 17
By Balance, 30th June, 1895, brought down		25 17

Edmundston Reserve, N.B. (No. 175)

By Balance, 30th June, 1894		13 15
Interest on invested capital		0 48
To Balance, 30th June, 1895	13 63	
	13 63	13 63
By Balance, 30th June, 1895, brought down		13 63

Nanaimo River Band, B.C. (No. 176)

By Balance, 30th June, 1894		140 15
Interest on invested capital		4 92
Rent		100 00
To New Vancouver Coal and Mining Co., refund of amount paid for coal prospecting license	50 00	
Percentage on collections carried to credit of Indian Land Management Fund	6 00	
Balance, 30th June, 1895	189 07	
	245 07	245 07
By Balance, 30th June, 1895, brought down		189 07

Department of Indian Affairs.

Chuk-Chu-kualk Band, B.C. (No. 177)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		340 12
Interest on invested capital		11 92
To Balance, 30th June, 1895	352 04	
	352 04	352 04
By Balance, 30th June, 1895, brought down		352 04

Rolling River Band (No. 178).

By Balance, 30th June, 1894		24 91
Interest on invested capital		0 88
A. E. Forget, fine		10 00
Transferred from Portage la Prairie Band amount credited in error		108 44
To Chas. A. Flower, services as constable	13 65	
J. A. Markle, witness fees in liquor prosecution	2 00	
Percentage on collections carried to credit of Indian Land Management Fund	60	
Balance, 30th June, 1895	127 98	
	144 23	144 23
By Balance, 30th June, 1895, brought down		127 98

Big Cove Reserve, N.B. (No. 179).

By Balance, 30th June, 1894		300 00
Interest on invested capital		10 52
Land sale		50 00
To C. Richardson, expenses in connection with assault cases	11 90	
Percentage on collections carried to credit of Indian Land Management Fund	5 00	
Balance, 30th June, 1895	343 62	
	360 52	360 52
By Balance, 30th June, 1895, brought down		343 62

Chippewayan Band, Onion Lake (No. 180) *

By Balance, 30th June, 1894		23 50
Interest on invested capital		0 80
To Balance, 30th June, 1895	24 30	
	24 30	24 30
By Balance, 30th June, 1895, brought down		24 30

* No. 181 is closed.

Dokis Band (No. 182)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		47 00
Interest on invested capital		1 68
To Balance, 30th June, 1895	48 68	
	48 68	48 68
By Balance, 30th June, 1895, brought down		48 68

Piapot's Band (No. 183).

By Collections for hay permits		72 50
To Tinning & Hoskins, tea and tobacco	72 50	
	72 50	72 50

Cowessess Band (No. 184).

By Balance, 30th June, 1894		42 96
Interest on invested capital		1 48
To Balance, 30th June, 1895	44 44	
	44 44	44 44
By Balance, 30th June, 1895, brought down		44 44

Turtle Mountain Sioux (No. 185).

By Balance, 30th June, 1894		2 70
Interest on invested capital		0 12
To Balance, 30th June, 1895	2 82	
	2 82	2 82
By Balance, 30th June, 1895, brought down		2 82

Stryen Reserve, B.C. (No. 186).

By Balance, 30th June, 1894		225 60
Interest on invested capital		7 88
To Balance, 30th June, 1895	233 48	
	233 48	233 48
By Balance, 30th June, 1895, brought down		233 48

Louis Bull's Reserve, Hobbema Agency, N.W.T. (No. 187)

By Balance, 30th June, 1894		125 00
Interest on invested capital		4 36
Amounts credited sundry Indians for beef		126 98
To Mahaffey & Clinkskill for cattle purchased for sundry Indians	60 00	
Refund of part of amounts credited sundry Indians for beef	65 00	
Amount credited Indians for beef transferred to Post Office Savings Bank	131 34	
	256 34	256 34

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Kakawistahaw's Reserve (No. 188)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance 30th June, 1894		18 80
Interest on invested capital		4 68
Wahsahcase Saysaysen, for beef sold department		82 74
To Amount transferred to P. O. Savings Bank for credit of Wahsahcase	82 74	
Balance 30th June, 1895	19 48	
	102 22	102 22
By Balance 30th June, 1895, brought down		19 48

Sweet Grass Band, Battleford Agency (No. 189)

By Balance 30th June, 1894		41 58
Interest on invested capital		1 48
Minakos for beef		30 66
To Coming Day, beef sold department	10 00	
J. M. Skelton, buckboard for Little Ploughman	25 00	
Little Ploughman, refund of amount retained on account of beef sold dept	6 58	
Amount transferred to P. O. Savings Bank for credit of sundry Indians for beef sold department	32 14	
	73 72	73 72

Little Pine's Band (No. 190)

By Balance 30th June, 1894		69 48
Interest on invested capital		2 44
Muskwa for beef sold department		39 48
To Wahahastocah and Okitonin on account of amount at credit for beef refund	30 00	
Transfer from account of Moosomin's Band of amount paid Muskwa for beef in July, 1894	39 48	
Amount transferred to P. O. Savings Bank for credit of sundry Indians	41 92	
	111 40	111 40

Moosomin's Band (No. 191)

By Little Pine's Band for transfer of amount paid Muskwa for beef	39 48	39 48
To Muskwa for refund of amount at credit for beef		
	39 48	39 48

Mosquito Band, Battleford Agency (No. 193)*

By Balance 30th June, 1894		4 00
Interest on invested capital		0 16
To Thunderchild's Band for transfer of amount paid Sheenasappa for beef of 1894-95	4 00	
Amount transferred to P. O. Savings Bank to credit of sundry Indians	0 16	
	4 16	4 16

* No. 192 closed.

Chiniquay's Band, Sarcee Agency, N.W.T. (No. 194)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		43 46
Interest on invested capital		1 52
To Stony Band, transferred to close	44 98	
	44 98	44 98

Standing Buffalo's Band, N.W.T. (No. 195)

By Balance, 30th June, 1894		23 50
Interest on invested capital		0 84
To Balance, 30th June, 1895	24 34	
	24 34	24 34

Keeseekowenin's Band, N.W.T. (No. 196)

By Balance, 30th June, 1894		75 20
Interest on invested capital		2 64
Riding Mountain Indians, amount credited latter transferred		32 04
Refund of amount for wire from J. H. Ashdown, overcharged		0 35
To The Locked Wire Fence Co., wire for fencing	70 40	
J. H. Ashdown, barbed wire	39 83	
	110 23	110 23

Thunderchild's Band, N.W.T. (No. 197)

By Mosquito Band for amount paid Sheenasappa transferred		4 00
To Sheenasappa for beef	4 00	
	4 00	4 00

Poundmaker's Band, N.W.T. (No. 198)

By Balance, 30th June, 1894		22 50
Interest on invested capital		0 80
To Basil Favel, beef sold department	22 50	
Amount transferred to P. O. Savings Bank, per credit of sundry Indians for beef	0 80	
	23 30	23 30

Sakimay's Band, Crooked Lake Agency, (No. 199)

By Balance, 30th June, 1894		1 13
Interest on invested capital		0 04
To Balance, 30th June, 1895	1 17	
	1 17	1 17
By Balance, 30th June, 1895, brought down		1 17

Bella Coola Band, B.C., (No. 200).

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		47 00
Interest on invested capital		1 64
Rent		50 00
To Percentage on collections carried to credit of Indian Land Management Fund	3 00	
Balance 30th June, 1895	95 64	
	98 64	98 64
By Balance, 30th June, 1895, brought down		95 64

Saddle Lake Band, N.W.T. (No. 201)

By Balance, 30th June, 1894		40 00
Interest on invested capital		1 40
S. Steinhauer and A. Steinhauer, beef sold department		64 00
John Whitford, beef sold department		25 42
To Marie Muskeg, balance due on beef sold department	40 00	
Amount transferred to P. O. Savings Bank for credit of sundry Indians	90 82	
	130 82	130 82

Sharphead's Reserve, N.W.T. (No. 202)

By Balance, 30th June, 1894		9 40
Interest on invested capital		0 32
Collections on account of hay permits		15 00
Amount transferred from Suspense Account for hay permits		9 64
To John West, shingle-mill	33 18	
Percentage on collections carried to credit of Indian Land Management Fund	0 90	
Balance 30th June, 1895	0 28	
	34 36	34 36
By Balance, 30th June, 1895, brought down		0 28

Seymour Creek Indians, B.C. (No. 203)

CAPITAL.		
By Balance, 30th June, 1894		
To Balance, 30th June, 1895	597 66	597 66
	597 66	597 66
By Balance, 30th June, 1895, brought down		597 66
INTEREST.		
By Balance, 30th June, 1894		
Interest on invested capital		3 06
To Balance, 30th June, 1895	24 06	21 00
	24 06	24 06
By Balance, 30th June, 1895, brought down		24 06

Umpukpulquatum Indians, B.C., (No. 204)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Balance, 30th June, 1894		623 28
Interest on invested capital		21 80
To Balance, 30th June, 1895	645 08	
	645 08	645 08
By Balance, 30th June, 1895, brought down		645 08

Estate of William Day (No. 206)*

By Independent Order of Foresters, insurance endowment on life of William Day		1,000 00
To A. McKelvey, expenses of children to the Shingwauk Home	40 00	
Joseph Noddie, account against estate	15 10	
Wm. Ayers " "	3 56	
N. Hill " "	3 88	
Mrs. C. Gilbert " "	2 63	
Wm. Fish " "	1 05	
J. J. Poole " "	3 16	
Percentage on collections carried to credit of Indian Land Management Fund	60 00	
Balance, 30th June, 1895	870 62	
	1,000 00	1,000 00
By Balance, 30th June, 1895, brought down		870 62

Fisher River Indians Reserve No. 44 in Treaty No. 2 (No. 209)†

By H. Crowe, for rent of mill		100 00
To Percentage on collections carried to credit of Indian Land Management Fund	6 00	
Balance, 30th June, 1895	94 00	
	100 00	100 00
By Balance, 30th June, 1895, brought down		94 00

Piegan Indians (No. 210)

By Towipe, for beef sold department		100 00
H. Potts " "		104 88
Portage la Prairie Band, credited latter in error		57 79
Transfer of amount credited sundry account in error in 1883		100 00
To Towipe, beef money refunded	50 00	
Amount transferred to post office savings bank	154 88	
Balance, 30th June, 1895	157 79	
	362 67	362 67
By Balance, 30th June, 1895, brought down		157 79

* No. 205 is an appropriation account and will be found on page 15.
† Nos. 207 and 208 are appropriation accounts and will be found on page 15.

Assabaska Band No. 35 C, Man. (No. 211)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By J. Robinson, moiety of liquor fine		40 00
To Percentage on collections carried to credit of Indian Land Mangement Fund	2 40	
Balance, 30th June, 1895	37 60	
	40 00	40 00
By Balance, 30th June, 1895, brought down		37 60

Reserve 38 C "The Dalles" Winnipeg River (No. 212).

By E. McColl, moiety of liquor fine		25 00
Rat Portage Band, amount credited latter in error		37 60
To Percentage on collections carried to credit of Indian Land Management Fund	1 50	
Balance, 30th June, 1895	61 10	
	62 60	62 60
By Balance, 30th June, 1895, brought down		61 10

Muscowpetung's Reserve 80 (No. 213).

By Collections on account of hay permits		22 00
To Tinning & Hoskins, tea and tobacco	22 00	
	22 00	22 00

Pasquah's Reserve 79, N.W.T., (No. 214).

By Collections on account of hay permits		3 00
To Tinning & Hoskins, tea and tobacco	3 00	
	3 00	3 00

Seton Lake, B.C. (No. 215).

By Timber sales		50 00
To Percentage on collections carried to credit of Indian Land Management Fund	5 00	
Balance, 30th June, 1895	45 00	
	50 00	50 00
By Balance, 30th June, 1895, brought down		45 00

Keesickouse Reserve 66 (No. 216).

By Liquor fine		25 00
To Percentage on collections carried to credit of Indian Land Management Fund	1 50	
Balance, 30th June, 1895	23 50	
	25 00	25 00
By Balance, 30th June, 1895, brought down		23 50

Nesky Nihl Band, B.C. (No. 217)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Canadian Pacific Railway, for right of way		650 00
To Percentage on collections carried to credit of Indian Land Management Fund	65 00	
Balance, 30th June, 1895	585 00	
	650 00	650 00
By Balance, 30th June, 1895, brought down		585 00

Wahsatanow's Band, Saddle Lake Agency, N.W.T., (No. 218).

By Amount of beef purchased by department		413 96
To Percentage on collections carried to credit of Indian Land Management Fund	24 84	
Balance, 30th June, 1895	389 12	
	413 96	413 96
By Balance, 30th June, 1895, brought down		389 12

Oak Lake Sioux Reserve 59, N.W.T. (No. 219).

By Portage la Prairie Band, transfer for amount credited latter in error		48 65
Amount credited sundry accounts in error and now transferred		26 12
To Balance, 30th June, 1895	74 77	
	74 77	74 77
By Balance, 30th June, 1895, brought down		74 77

Stangecoming Reserve, Mickiesiese Reserve 18 B., Man. (No. 220).

By Amount credited to sundry bands in 1883, in error, and now transferred		70 25
To Balance, 30th June, 1895	70 25	
	70 25	70 25
By Balance, 30th June, 1895, brought down		70 25

Long Sault Reserve 13, Man. (No. 221).

By Government account, for correct credit from 1883		27 43
To Balance, 30th June, 1895	27 43	
	27 43	27 43
By Balance, 30th June, 1895, brought down		27 43

Shoal Lake Reserve 39, Man. (No. 222).

By Rat Portage Indians, credited latter in error		29 98
To Balance, 30th June, 1895	29 98	
	29 98	29 98
By Balance, 30th June, 1895, brought down		29 98

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Shoal Lake Reserve 40, Man. (No. 223)

In account with the Department of Indian Affairs.

Service.	Debit.	Credit.
	$ cts.	$ cts.
By Rat Portage Indians, credited in error	.....	30 20
To Balance, 30th June, 1895	30 20	
	30 20	30 20
By Balance, 30th June, 1895, brought down	.....	30 20